The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1630.—Vol. XXXVI. LONDON, SATURDAY, NOVEMBER 17, 1866. {STAMPED ....SIXPENCE. {UNSTAMPED..FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—As the rules of the Mining Exchange PROHIBIT all its MEMBERS from ADVERTISING MINING SHARES at FIXED PRICES, the Committee feel it their duty to notify that they have no means of offering redress to such of the public as may deal with those advertising shares at fixed prices.
A List of the Members can be had on application to the Secretary.

MR. JAMES CROFTS, STOCK AND SHAREBROKER
No. 1, FINCH LANE, CORNHILL.
(Established 23 years.)

PRINCE OF WALES.—Evidences of a great mine accumulate rapidly and distinctly, and consequently all opinions now point to a great success, as will be seen by reports in the present Journal. The shares have become the most prominent item of the market, for dealing, speculation, or investment, but at the present price they have not advanced to one-half their prospective value. Mr. CROFTS solicits orders for cash, and immediate delivery.
HOLDERS of mining shares DIFFICULT OF SALE in the OPEN MARKET may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring ADVICE how to act in the DISPOSAL or ABANDONMENT of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.
Bankers: National Bank of Scotland, Finch-lane.

MR. WILLIAM LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C., STOCK AND SHAREDEALER, and MINING AGENT, has FOR SALE:—

100 Bottle Hill, 3s. 3d.	50 E. del Rey, 2s. 6d.	100 Rose. Con., 2s. 6d.
50 Chontales, £2 10s.	5 East Basset, £23¼.	50 South Darren, 35s.
50 Caldbeck Fells, 9s. 6d.	50 G. No. Laxey, 26s. 3d.	50 So. Condurrow, 11s 6d
10 Clifford, £6 5s.	50 Gt. Retallack, 9s.	30 Wheal Uny, 7s, 3d.
10 Caradon Con., £10⅝.	25 Gothic, £2 8s. 9d.	50 Wh. Grenville, 23s 3d
75 Cen. American, 12s 9d	50 Gt. So. Tolgus, 6s. 3d.	65 Wheal Crebor, 12s. 9d.
100 Drake Walls, 9s. 6d.	50 Gwydyr Park, 1s. 3d.	2 West Frances, £23¾.
100 Dale, 2s.	55 Min. Rights 10s. 6d.	5 W. Chiverton, £59½.
50 East Rosewarne, 8s 3d	100 New Birch Tor, 6s. 9d.	

MR. LELEAN, ENGLISH AND FOREIGN STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, LONDON, E.C.
Bankers: Robarts, Lubbock, and Co., Lombard-street.

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for November contains the fourth of a series of articles on the whole circle of Investments—British and Foreign Stocks and Loans, Bank and Finance, Railway and Insurance, Gas and Water, and Manufacturing and Commercial Shares; with such other information as is necessary to guide intending investors amidst the shoals and quicksands of the multifarious species of investments that now present themselves; and a tabulated statement of the dividends paid during the last five years in English and American Railways. Published by Pottle and Son, 14 and 15, Royal Exchange, London, E.C.
Price 6d., or 5s. annually.

CARNARVONSHIRE CONSOLS (LIMITED), AND SHARES FULLY PAID.—MR. LELEAN urgently recommends the immediate purchase of these shares, now quoted par to ⅛ prem.—11, Royal Exchange, E.C.

NOTICE OF REMOVAL.—McNEILL and LONG have REMOVED from 7, Pope's Head-alley, Lombard-street, to 31, THREADNEEDLE STREET, LONDON, E.C.

MESSRS. McNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS,
31, THREADNEEDLE STREET, LONDON, E.C.

MR. WILLIAM SEWARD, STOCK AND SHAREDEALER,
19, THROGMORTON STREET, LONDON, E.C.

GEORGE RICE, SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C., (24 years' experience), Member of the Mining Exchange), DEALS in MINING SHARES at close market prices of the day, either as BUYER or SELLER, for cash or account.

Clifford	£ 6⅛	£ 7¼	East Caradon	£ 5¼	£ 5½
Caradon Consols	8	9	Frontino	2s.6d.	—
Caldbeck Fells	22s.	1¼	Great Vor	16½	17
Chiverton	7	7⅛	Marke Valley	4	4¼
Chiverton Moor	4	4¼	North Treskerby	3	3¼
Chontales	2⅛	3	Prince of Wales	25s.	26s.
East Basset	22	23⅛	St. John del Rey	50	51
East Carn Brea	2⅛	2½	West Chiverton	59	60
East Grenville	1¾	2	Wheal Grenville	1	1¼
East Lovell	11	11½	Wheal Crebor	10s.	12s. 6d.
East Russell	3	3¼			

There are some low-priced shares in the above list which should be bought immediately for a great rise, whilst there are others which have attained a high figure should be sold at once.
Money advanced on mining shares.
Nov. 16, 1866. Bankers: Bank of England.

CHONTALES GOLD MINES (LIMITED).—GEORGE RICE deals largely in these shares, as BUYER or SELLER, at close market prices, and being in possession of most important information as to the prospects of the mines and market, can well advise both speculators and holders of these shares when to sell or buy to their advantage.—Nov. 16, 1866.

GEORGE RICE recommends the purchase of WHEAL CREBOR selling at 12s. per share, or £3500 for the mine. PRINCE OF WALES, in same district is now selling for 25s. per share, or about £17,500 for the mine.
GEORGE RICE recommends the purchase of WHEAL GRENVILLE, selling for £1 5s. per share, or £8000 for the entire mine. EAST LOVELL, a similar tin mine, now stands at £11⅛ per share, or £22,000 for the mine.

MR. G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.
BUYER of East Bottle Hill shares. Sellers state number and lowest price.
Correct Daily Price List may be had on application.
Money advanced to any amount on legitimate stocks and shares.
References exchanged.

MR. G. D. SANDY'S MONTHLY INVESTMENT CIRCULAR—SPECIAL NOTICE.—*Vide* all hitherto published.
48, Threadneedle-street, London, E.C., Nov. 16, 1866.

MR. EDWARD BREWIS is a BUYER or SELLER, for Cash or Account, or for dealings end of the Year 1866, end of March, June, or Sept., 1867, in the undermentioned MINES:—

Chiverton.	Chiverton Moor.	Westminster.
West Chiverton.	East Bottle Hill.	Chontales Gold.
South Condurrow.	Prince of Wales.	West Caradon.
East Lovell.	Caldbeck Fells.	Clifford.
Frontino and Bolivia	North Treskerby.	Great Vor.
Grenville.	East Grenville.	Dyffryn Castell.

DYFFRYN CASTELL.—SPECIAL BUSINESS in these shares, to *bona fide* purchasors, or investors' own advantage.
No. 8, Warnford-court, Bank, E.C.

FOR SALE, the following shares at nett prices:—20 Great South Tolgus, 14s.; 20 North Dolcoath, 4s. 6d.; 50 Prince of Wales, 24s.; 5 West Caradon, £16; 20 North Treskerby, £3¼; 50 East Bottle Hill, 4s. 6d.; 50 Gwydyr Park, 1s. 6d.; 30 New Lovell, 6s. 6d.; 30 Garlidna, 2s. 6d.; 20 South Callington; 5 Westminster Lead, £5 (fully paid); 20 West Wheal Kitty; 50 Bottle Hill, 4s.; 50 Wheal Crebor, 15s.; 10 Rose and Chiverton United.
Apply to Mr. R. EMERSON, 28, Great Winchester-street, London, E.C.
Advice given on the sale and purchase of shares.
Eighteen years' experience in Cornwall and twelve in London.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE:—50 Frank Mills; 60 Wheal Agar; 100 South Grenville; 20 Wheal Grenville; 2 Devon Consols; 5 Minera; 150 Gwydyr Park; 25 Caradon Consols; 70 East Rosewarne; 50 South Darren; 10 St. Just United; 100 West Wheal Kitty; 120 Gothic; 30 North Treskerby; 5 West Caradon; 50 Rosewarne United; 5 Great Vor; 3 New Seton; 100 Bottle Hill; 2 Providence; 60 Gawton; 50 Great North Downs; 100 Great Retallack; 75 Quebrada; 80 Pestarena Gold; 50 Yudanamutana; 200 Anglo-Brazilian; 50 Don Pedro.
Parties desirous of purchasing any of the above shares will please state number and price.

CORNISH AND DEVON MINES:—PETER WATSON'S "WEEKLY CIRCULAR," No. 397, Vol. VIII., of yesterday (Friday, Nov. 16), price 6d. each copy, contains important information on the following mines:—

West Caradon.	East Providence.	North Treskerby.
East Lovell.	Wheal Chiverton.	Cook's Kitchen.
North Wheal Crofty.	Stray Park.	Grambler & St. Aubyn.
	Dolcoath.	

With Special Remarks on Mining Shares as an Investment for Capital.
79, Old Broad-street, London, E.C.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST.—MR. PETER WATSON begs to call particular attention to the fact that nearly all the afternoon or evening London newspapers contain the prices of stocks and shares up to about One o'clock only (on same day as published), instead of Four to Five o'clock. The difficulties which shareholders and the investing public have encountered in seeking for correct and latest daily prices induced him, three months ago, at the suggestion of several of his friends and customers, to publish every evening "The London Daily Record—Stock and Share List," which is ready at about Half-pase Five o'clock, and delivered to subscribers in and around London the same evening. It is posted in time for the same evening's mail to country subscribers, who are thus enabled to get the latest prices some eight or ten hours earlier than they formerly had the means of doing. The importance of this at the present anxious moment must be obvious to all, as the daily fluctuations in prices of railway stocks, banks, financial, and other shares are sometimes very great.
It is his constant endeavour to convey the best and most reliable information (derived from authentic sources), and to give the latest actual marketable prices of buyers and sellers. Every person, therefore, interested in stocks and shares will find it to their interest to subscribe to the "London Daily Record—Stock and Share List." Those who desire to have it sent to them regularly every evening, will please sign the annexed form, and forward to Mr. PETER WATSON, 79, Old Broad-street, London, E.C.
Annual subscription, £1 1s.; by post, £2 5s. Monthly subscription, by post, 4s. Single copy, 1d.; by post, 2d.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST.

Please put my name down as a subscriber to the above Daily List, and forward the same to me, for* .....
Name .....
Address.....
Date.....
* Here insert weeks or months.
To Mr. PETER WATSON, 79, Old Broad-street, London, E.C.

NOTICE OF REMOVAL.
MR. EDWARD COOKE, of 2, Crown Chambers, Threadneedle-street, has REMOVED to 76, OLD BROAD STREET (ground floor).

MR. EDWARD COOKE, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
Is a BUYER or SELLER of Tresavean, East Lovell, Great Vor, Clifford, Tincroft, North Treskerby, Chontales, Marke Valley, East Caradon, Credit Foncier, Anglo-American, Atlantic Telegraph, and American securities, at the current prices of the day. Telegraphic messages promptly attended to.
Satisfactory references given in any town in the United Kingdom.
SPECIAL BUSINESS in West Caradon, either as a buyer or seller.
Bankers: Alliance Bank, Lothbury.

MR. C. A. POWELL, SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange), has SPECIAL BUSINESS in West Chiverton, Chiverton, Caldbeck Fells, Frontino, Chontales, Prince of Wales, and East Grenville.
Parties wishing to BUY or SELL in either of the above will be dealt with at a fair margin on the market price.
Nov. 16, 1866. Bankers: Bank of England.

CALDBECK FELLS LEAD MINES (CUMBERLAND).—These mines are being developed in a most satisfactory manner. There can scarcely be a doubt but that they will soon rank amongst the best lead mines in the kingdom The 70 tons of lead sampled on the 30th ult. realised £950, instead of £800, as estimated.
C. A. POWELL, 78, Old Broad-street, E.C.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C.
Bankers: London and Westminster.

JOHN RISLEY, 32, LOMBARD STREET, and MINING EXCHANGE, LONDON, E.C., has SPECIAL BUSINESS in East Grenville, Wheal Buller, and West Caradon shares.

MESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS,
16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Messrs. WILSON, WARD, and Co. are DEALERS in the FOLLOWING SHARES, at market prices: Frontino and Bolivia Gold, Great Laxey, Caldbeck Fells, Penhale and Lomax, New Wheal Towan, and North Treskerby. Can recommend two good mines for investment. Their fortnightly Circular may be had on application.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at nett prices:—

40 North Crofty, 41s. 9d.	50 Chontales, 11s. 3d. dis.	20 No. Treskerby, £3⅛.
50 Caldbeck Fells, 19s.	20 Chiv. Moor, £4 6s. 3d.	60 Prince of Wales, 25s 6d
2 W. Chiverton, £59¼.	10 Chiverton, £7⅛.	50 Mineral Rights, 9s. 9d
30 Gt. So. Tolgus, 10s. 6d	5 Great Vor, £17¼.	50 Gt. No. Laxey, 26s 3d
5 East Lovell, £11¾.	15 West Caradon, £15⅛.	10 East Caradon, £5⅞.
70 West Kitty, 5s. 6d.	10 Clifford, £7⅛.	1 Wheal Seton, £144.
25 E. Carn Brea, £2 10 6	40 S. Condurrow, 10s. 9d.	60 Great Retallack, 9s 6d
5 Carn Brea, £12½.	50 North Downs, 4s. 9d.	50 Crebor, 10s. 6d.
5 South Crofty, £13.	15 East Russell, £3 1s 3d	100 Frontino, 2s. 6d.
5 Grambler, £4 16s. 3d.	30 Drake Walls, 9s. 9d.	3 Providence, £22¼.
30 E. Providence, 6s. 9d.	30 South Darren, 37s.	4 East Basset, £23.
5 Herodsfoot, £30¾.	20 Wheal Uny, 7s. 6d.	40 Wh. Grenville, 23s. 3d
25 East Grenville, 39s.	25 E. Gunnislake, 9s. 6d.	15 Hingston, £2 18s.
15 Marke Valley, £4¼.	5 St. John del Rey, £50½	50 Rosewarne Un., 8s. 6d
5 Tresavean, £43⅛.	50 East Rosewarne, 7s 6d	30 Wheal Agar, 20s.
40 Carn Camborne, 25s 6d	7 Gt. Wh. Fortune, £5.	40 Cen. American, 13s 9.
1 Devon Consols, £438.	1 West Seton, £127⅛.	10 Stray Park, 33s. 6d.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., is a DEALER in the FOLLOWING SHARES, for cash or "time on":—

Prince of Wales.	East Lovell.	Caradon Consols.
Marke Valley.	East Gunnislake.	Chontales.
North Treskerby.	East Carn Brea.	Wheal Seton.
Chiverton.	East Russell.	Devon Consols.
Chiverton Moor.	Great Vor.	Buller.
West Chiverton.	Tincroft.	West Caradon.
		East Rosewarne.

An OFFER WANTED for Okel Tor, New Trelawny, New Devon Consols, Lady Bertha, and Old Gunnislake.
PRINCE OF WALES.—I am pleased to hear they have cut the lode to the west of the cross-course, where it has a much better appearance than to the east of the cross-course, and it is my opinion that they will have large courses of ore as they get out of its influence, seeing that it is full 7 ft. wide. They have driven east of cross-cut 21 fms. through a continuous course of ore, worth on the average £35 per fm., and the lode very much improving again in the present end. They have also commenced cross-cutting north and south at the 55, where I have no doubt when the lodes are intersected they will be found richer than even in the 45. I say again to all my friends double your interest at the present low prices. Bankers: Bank of England, and Consolidated.

INVESTMENT, LOAN, AND BANK AGENCY.—Established 1839.
BANKERS—London and County Bank.
This Agency undertakes the investment of Capital in British and Foreign Government Stocks and Joint-stock Companies upon advantageous terms.
It is notorious that market prices are in many instances ruled by the operations of speculators, and those who are interested in the maintenance of fictitious values; therefore, this Agency makes it a speciality to detach, as far as practicable, *bond fide* prices as separated from market prices, with the view to select sound securities, which upon reliable data may be appreciated as the most likely to speedily and substantially improve in value.
Every information afforded to Capitalists, Trustees, and others, who seek investments of a strictly safe and eligible character.
Loans granted on Stocks and Shares having a market value, interest allowed upon deposits, and every description of Bank and Money Agency business transacted. CHARLES PETERS, Sec.
No. 12, Clement's-lane, Lombard-street, London, E.C.

MR. CHARLES THOMAS is a BUYER of East Seton, West Wheal Kitty, West Godolphin.—No. 3, Great St. Helen's, London,

---

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C., STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest nett prices for cash or account.
Parties of respectability can have transfers registered in their names previous to payment. Daily price list on application.
Bankers: London and County Bank.

ESTABLISHED 1852.
SAFE INVESTMENTS FOR CAPITAL,
Paying 10 to 20 per cent. per annum in dividends.
SHAREHOLDERS, CAPITALISTS, and INTENDING INVESTORS
Should at all times consult
SHARP'S GENERAL INVESTMENT CIRCULAR
(Gratis and post free).
It is a SAFE RELIABLE GUIDE, containing valuable information. It also gives the market prices of stocks and shares of "every" description, the amount of dividends given in every undertaken, and when paid.
SPECIAL BUSINESS AT CLOSEST MARKET PRICES IN

Prince of Wales.	Wheal Crebor.	Wheal Grenville.
Wheal Basset.	West Chiverton.	Chiverton.
Chiverton Moor.	North Crofty.	Wheal Seton.
East Caradon.	East Lovell.	West Caradon.
East Basset.	Wheal Buller.	Great Vor.
Great Laxey.	Chontales.	St. John del Rey.

HENRY GOULD SHARP, 32, POULTRY, LONDON, E.C.

JAMES D. GENN AND CO., STOCK AND SHAREDEALERS, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. THOMAS THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. WILLIAM WARD, STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C.

MR. JOHN LITTLE, STOCK AND SHAREDEALER,
77, OLD BROAD STREET, LONDON, E.C. (late of Redruth).
Immediate attention to orders by telegraph or letter.
Prompt cash settlements.

MR. JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange),
Executes orders in mining shares at nett prices, equivalent to 1¼ per cent. commission, and Stock Exchange securities at the usual charge.
All communications punctually attended to, and cash sent on receipt of transfer.
Bankers: The Joint Stock Bank.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS,
CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Closing prices, Friday, Nov 16.

	Buyers.	Sellers.		Buyers.	Sellers.
Carn Brea	£12½	£15	North Treskerby	£ 3	£ 3¼
Chiverton	7	7½	*North Crofty	2	2¼
Chiverton Moor	4¼	4½	P. of Wales (call pd.)	24s.	26s.
Clifford	6	7	West Chiverton	59	60
*East Caradon	5½	6	*West Caradon	15	16
East Lovell	11¼	11¾	West Seton	120	130
*Great Retallack	9s.	11s.	*Wheal Buller	19	21
Great Vor	17	17½	Wheal Seton	140	145

Messrs. WARD and JACKMAN refer their friends to their remarks on p. 744 respecting those mines marked *.
All orders to buy or sell shares of every description promptly attended to, for cash or account.
Bankers: London and Westminster, Lothbury.

MR. E. GOMPERS, STOCK AND SHAREDEALER, 3, CROWN COURT, THREADNEEDLE STREET, LONDON.
PRINCE OF WALES MINE.—In the *Mining Journal* of Oct. 13 I called the attention of my friends and the public to this mine, believing then, as I do now, from private reports received, it to be as fair a speculation as any on the market. At a meeting on Thursday a call was made, clearing off not only all the present liabilities but discharging the cost to end of the present year; this is not taking into account the ore that will be raised before that time. Looking at the present general appearance of the mine, the rich run of ore ground gone through in the 45 east, and an improvement expected daily in the western part, together with the probability of the lode being cut in the 55 east in about six weeks, I believe that ere long Prince of Wales must enter the Dividend List.
Mr. GOMPERS has BUSINESS in Prince of Wales shares, and copies of his private report can be had on application.

MATTHEW GREENE, STOCK AND SHAREDEALER, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
NEW CLIFFORD.—MATTHEW GREENE is confident this will be a great prize (some beautiful stones of copper ore can be seen at the company's offices), and advises the purchase of these shares at once; price, 2, 2⅛.
WESTMINSTER LEAD MINE.—Captain John Kitto, late of Great Laxey, writes:—"This will be a splendid mine." MATTHEW GREENE can secure a few shares at £5 2s. 6d., and strongly recommends the purchase of them at once.
MATTHEW GREENE is always in a position to BUY or SELL Railway, Banks, Miscellaneous, and Mining Shares.
Bankers: Imperial Bank.

MR. WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, continues to deal, at close market prices, in all good sound DIVIDEND and PROGRESSIVE MINES, either for cash or the account.
BUSINESS in the FOLLOWING MINES:—Great Vor, Trelawny, Emily Henrietta, Cook's Kitchen, New Clifford, East Basset, West Tolgus, Camborne Vean, West Frances, Westminster, St. John del Rey, Don Pedro North del Rey, and Chontales.

MR. J. B. REYNOLDS, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.
Business transacted in British and Foreign Stocks, Railway, Bank, Insurance, Financial or Mining Companies Shares, and all Miscellaneous Securities, at the lowest market quotations. Exchanges effected, and purchasers found for shares not generally marketable.
Mr. REYNOLDS is prepared to deal for cash in—

Westminster Mines.	Gothic.	Rose & Chiverton Utd.
Chontales Gold.	Crebor.	West Caradon.
Caradon Consols.	Wheal Agar.	

As well as all market mines.
Mr. REYNOLDS does not advertise shares at fixed prices, but is prepared, nevertheless, to deal on as favourable terms as those who do.—Nov. 10, 1866.

REYNOLDS'S CIRCULAR FOR NOVEMBER,—Applications for this will be received during the coming week, and all INVESTORS in BRITISH MINES and other stocks should procure a copy.
OPINIONS OF THE PRESS.
The following extract is from the *Investors' Guardian*:—
"We have received a copy of 'Reynolds's Investment Circular,' which contains much information that is valuable to the investor. It contains references to the principal railways, banks, insurance, mining, and miscellaneous companies, and some interesting statistics concerning the past and present state of the metal market."
The above "Circular" will be forwarded gratis, on application to Mr. J. B. REYNOLDS, 70 and 71, Bishopsgate-street Within, London, E.C.
November 17, 1866.

MESSRS. ROBERTSON BROTHERS AND CO., STOCK AND SHAREDEALERS,
16, ABCHURCH LANE, LOMBARD STREET, E.C.,
Are prepared to BUY or SELL, at close prices, for cash or the fortnightly settlement, shares in East Wheal Lovell, Clifford Amalgamated, Great Wheal Vor, East Caradon, West Caradon, East Wheal Russell, Prince of Wales, Chontales Gold, Atlantic Telegraph, and Anglo-American Telegraph.
Telegrams promptly attended to.

MINING JOURNAL ONE PENNY NEWSPAPER

Original Correspondence.

FIRE-PROOF BUILDINGS, AND STEAM FIRE-ENGINES.

The constant occurrence of destructive fires in the metropolis has become an evil of such magnitude and gravity as to demand the serious and active attention of all who by practical assistance or practical advice may fairly hope to contribute towards its diminution. We are of those who think that much yet remains to be done in the way of making precautions against fire, and that in the construction of large buildings, as warehouses and manufactories, on what are called fire-proof principles, there is still great room for improvement. It is an unfortunate characteristic of the people of this country that they are too apt to defer the application of means within their reach for the avoidance of misfortune until the misfortune itself is at their very doors, and its aversion is an impossibility. This is so individually and collectively, and, unfortunately, it must be said that, as a rule, those in authority are not less prone to the failing than those who are under it. Hence we have the periodical recurrence of panics of various kinds, and remedial measures hastily and, therefore, imperfectly applied become the sorry substitutes for reformations which ought to have been accomplished at leisure. The danger at length disappears, apathy resumes its sway, and then we await a further calamity to teach again the lessons which ought to have been learnt, and acted upon before.

The great fires which, in the early part of the present year, destroyed several of the noble warehouses in the St. Katharine's Docks, and caused the sacrifice of many thousands of pounds worth of property within them, afford abundant evidence of the fact that as yet the proper mode of construction of such buildings is not understood, or, at least, not practiced. It has been the custom to rely very much upon the use of three materials in the erection of warehouses, and each of which is said to be incapable of combustion. These are stone, brick, and iron; but alas! in the hour of trial they are too often found wanting, and when fire attacks the buildings in which they may have been lavishly employed they are powerless as paper to resist the devouring element, as witness the occasional destruction of piles of magnificent warehouses at Liverpool, Manchester, and elsewhere. The great conflagration at Cotton's Wharf, near Londonbridge, when buildings occupying a space of 40 acres of ground were demolished, took place in spite of the modern preservative appliances with which those buildings were replete. The truth is that although the materials named are doubtlessly well adapted in themselves for the purpose of resisting fire, their improper application is often fatal to their usefulness. Very frequently the dividing walls of warehouses are simply partitions, varying from one to three bricks in thickness. The natural consequence is, that on the ignition of inflammable material between them they speedily attain to a red heat, and, instead of confining the flames to one spot, assist in conducting them throughout a whole range of buildings. In order to obviate so serious a calamity as this, there should be, in all cases where party or dividing walls are necessary, not one partition but two, with a clear distance of 9 in. or 12 in. between them. The air spaces would then form valuable non-conducting media, and isolation would be ensured.

In the construction of the floors of warehouses it is essential that the bearings of their main support should be made as short as possible, and iron uprights or columns ought to be dispensed with altogether. Wherever cast-iron girders are used for the support of floors room should be left at the ends for expansion, and wherever it is possible they should rest upon brickwork. In no case ought the bearings to exceed 20 ft. in distance from each other. The basement floor should be arched over in groins and paved; and wherever such an arrangement could be made the entrance to it should be from the outside of the building, and the basement floor should be made, as far as practicable, the depository for the most combustible material which the warehouse will have to contain.

In the construction of the upper floors of warehouses lightness and strength are the desiderata. Wrought-iron girders are the best supports for the floors, and they should be placed at distances not exceeding 3 ft. from each other. On the girders timber planking may be laid, with York or other paving-stone bedded on its surface. The lower side of the planking should be rendered thickly with lime and hair, which tends largely to make the timber uninflammable. Staircases should in all cases be enclosed within the walls, the steps and risers to be of stone or wrought-iron. The top of the staircase should be covered with strips of wrought-iron, so as to prevent an upward draught, as far as possible, when fire occurs.

With regard to the construction of the roof of a warehouse, two points have to be considered primarily, and these are the making it inaccessible to the action of fire within, and a non-conductor of heat externally. Light wrought-iron trusses and purlins are best adapted for these purposes as a basis, and upon these boards placed diagonally, and covered with thick felt for the reception of slate, may be fixed. The underside of the boards should be thickly plastered in a similar manner to the floors. All party-walls ought to be carried at least 3 ft. above the point of junction between adjoining roofs. Such are some of the main points to be observed in the construction of fireproof buildings. Minuter questions of detail we have not space at present to indicate. Tanks of water on the highest parts of the buildings, with communications to each floor, and fusible plugs for the natural release of the water where it is required, would tend to make the arrangements complete, and constitute each warehouse its own fire-extinguisher. The supply pipes to the tanks might be placed on the outside of the building, so that the cisterns would be replenished during the progress of a fire. Were such precautions observed generally it is our firm opinion that fires in warehouses would be of far less serious consequence than they usually are at present.

With the most rigid attention, however, to the practical instructions given above, fires will occur, whether from the spontaneous combustion of materials, the carelessness of individuals, or worse, the commission of the crime of incendiarism, and it is essential that external appliances shall supplement internal preservatives. Fortunately a better system prevails with regard to the suppression of fires than was, until recently, in existence. The consolidation of the Fire Brigades of London under one distinct management, which dates from the commencement of the present year, was a vast step in advance, and it is only just to the present management of the department to say that it appears to be equal to its duties, and ready to adopt real mechanical improvements. Foremost among these latter must be named the application of steam-power to the extinction of fires. Without tracing the "gradual steps and slow" by which the steam fire-engine made its way into the service of the Metropolitan Fire Brigade, and which would simply be to repeat a similar series of difficulties and impediments to that which besets the pathway of improvement generally, it may be stated that by dint of skill and perseverance, the London manufacturers of steam fire-engines have approached perfection in the construction of those valuable apparati. For the concentration of enormous power into small space, for economy of mechanical detail, for portability, and for strength, we know of nothing of a mechanical nature which surpasses the English steam fire-engine of the present day. Without instituting invidious comparisons between rival engineers, it may be said that no firm in the metropolis has been more eminently successful in this branch of the profession than the well-known house of Shand and Mason. It seems, indeed, that scarcely anything remains for others to accomplish, and but that we know that nothing made by human hands can be perfect, we should be tempted to say that their most recently-produced steam fire-engine cannot be improved upon.

One of these engines has been recently supplied to the Metropolitan Fire Brigade. It is a steam giant in a miniature form, and the reign of King Fire is always in jeopardy when his strength comes to be measured with its powers of suppression. No less than seven similar engines have been supplied by Messrs. Shand and Mason during the present year to the institution in question; whilst others have found their way to many continental cities, and to New Zealand and Australia. The total weight of the engine is only 25 cwts. The boiler is calculated for generating steam rapidly, for it contains upwards of 300 brass tubes of 1 inch diameter, and the working pressure is usually 150 lbs. on the square inch! Steam is raised equal to a pressure of 100 lbs. in ten minutes, from water perfectly cold at the time of lighting the fire. The engine is supplied with every arrangement for its purpose. It may be readily drawn by two carriage-horses, even when fully equipped with coals, water, hose, tools, and other accessories, and when eight sturdy firemen are mounted on its framing. The engine, at a late testing of its capabilities, forced a stream of water through 420 feet of hose to a height of 40 feet from the jet, and delivered in one hour no less than 8142 gallons. The fire-door was open nearly the whole of the time of trial. The steam cylinder is 7 in. in diameter, and the length of stroke of the piston 8 in., the pump being of 6⅜ in. in diameter. The high pressure at which the boiler is worked might give some cause for alarm, were it not known that its plates are welded instead of being rivetted, and that its safety-valve is literally infallible in its action, and, therefore, precisely what its name implies.

Of course, Messrs Shand and Mason do not confine themselves exclusively to the manufacture of the class of engines to which we have especially referred, but construct them of all dimensions, and suited to all circumstances. Their floating engines for the suppression of "long shore" fires, and portable ones for manufactories and ships, form the extremes, and between these are ranged steam and hand-fire engines of every known kind and of every variety of power.

Royal Mint, Tower-hill. ——— JOSEPH NEWTON.

MECHANICAL VENTILATION OF COLLIERIES.

SIR,—I read with much pleasure the references to Lemielle's, and other ventilators, in last week's Journal, but do not entirely agree that what has been done with mechanical ventilators has in any way shown that they are superior to the furnace, and the experiments recorded with regard to the action of Lemielle's ventilator certainly shows that unless the speed be regulated to the greatest nicety there is a very considerable loss of power. The details of the experiments at the Du Nord du Bois de Boussu Mine show that a Lemielle ventilator, 16 ft. 4¾ in. high, with wings 8 ft. 2½ in. wide, working in a casing 23 ft. 4¾ in. in diameter, will extract under the most favourable circumstances 20 cubic yards of air at each revolution. But it is only at a speed of about 10 revolutions per minute that this yield per revolution can be maintained. If the speed be either greater or less than the 10 revolutions per minute the result is less satisfactory. Thus, at five revolutions per minute the machine extracts 183·456 cubic yards of air per revolution, the velocity of air per minute being 390 ft. At ten revolutions per minute the machine extracted 201·618 cubic yards of air per revolution, and the velocity was 850 ft. per minute. And at 14·5 revolutions per minute 179·551 cubic yards per revolution were extracted, and the velocity was 1092 feet 6 inches per minute. There was a fourth experiment at 18 revolutions per minute, which gave slightly better results—188·855 cubic yards of air per revolution, and 1340 ft. velocity per minute—but no notice can be taken of this, because the engineers who made the experiments note that "in this experiment the velocity of the anemometer could not be taken at 3′ 3½″ above the ground, because the instrument was covered with water. The figures of this experiment are, therefore, too high, because the velocity of the current is always the most feeble at the height of 3′ 3½″."

That it would be most unfair to question the accuracy of figures given on the authority of an Imperial Chief Engineer of Mines, and certified by eight or nine other engineers, I readily acknowledge, but I should like either Mr. Ellis Lever or your Northumberland correspondent to explain how it happens that the results recorded *exceed* cent. per cent. The dimensions of the cylinder containing the fan are stated at 23 ft. 4½ in. diameter, by 16 ft. 4¾ in. long, consequently the solid contents would be about 260¾ cubic yards, or 7041 cubic feet. Of this space, judging from the drawings and descriptions, about one-half is occupied by the hexagon and wings; so that the pumping capacity is reduced to one-half, or (say) 131 cubic yards. But, to allow for inaccuracies, I will assume that only one one-third is thus occupied, and still I find that I have only a pumping capacity of less than 174 cubic yards, or 4694 cubic feet.

Assuming the capacity to be even 174 cubic yards, I am at a loss to know how one revolution can extract even 179½ cubic yards of air—the quantity given as the worst result obtained. Of course, as 4694, multiplied by 10, gives 46,940 as the cubic feet due to 10 revolutions, your Northumberland correspondent, in giving an extraction of 54,437 cubic feet per minute, has a difference of 7497 cubic feet per minute to account for. These figures may appear to be of but little importance to the general reader, but in so important a question as the substitution of mechanical for furnace ventilation, every detail should be strictly enquired into. COLLIERY ENGINEER.

Nov. 13.

DETECTION OF FIRE-DAMP.

SIR,—There are no doubt many of the readers of the *Mining Journal* who, like myself, entertain the most favourable opinion of the Fire-damp Indicator invented by Mr. Ansell, and who are willing to give him every credit for his ingenuity in constructing it; but I do not think a single practical man could be found who entertains the slightest hope that the use of the indicator in collieries would *prevent* the occurrence of a single explosion or the sacrifice of a single life; so that the proposition of Lord Kinnaird to render the use of the instrument compulsory is altogether out of place. The defect of Mr. Ansell's instrument, and I fear the very principle involved prevents its remedy, is that it only gives comparative indications, and that these cannot be relied upon. The principle of the discovery is this:—When the air outside the instrument differs from that within it, the two kinds will endeavour to combine, and the indicator will show to what extent the combination is going on. So long as the internal and external air are similar the instrument will stand at *zero*, no matter whether the air be pure or contains 50 per cent. of fire-damp, so that an Ansell's indicator if left alone will after a given time (the time required for the internal and external air to mix thoroughly) indicate *zero* or "pure air," although 50 per cent. of fire-damp be present.

The answer to this objection is that when the instrument has given an indication it should be re-set; but any instrument which requires this is worthless in a mine. If we keep a Davy lamp in an atmosphere containing (say) 5 per cent. of fire-damp, it will give the same indication for an indefinite period. Not so with Ansell's indicator, which in the course of a few minutes would indicate "pure air," the presence of 5 per cent. of fire-damp notwithstanding. It is true that the porous septa can be varied so that the indication will be continued for a longer or shorter period; but if it be arranged that the indication shall be continued, a sudden outburst of gas will not be recorded until a long time after it has taken place; whilst if it be made to indicate rapidly the record will as rapidly disappear. CARBON.

BLASTING BY ELECTRICITY.

SIR,—Your correspondent, "J. R.," says in last week's Journal that blasting by electricity would be of no use in mines. This is an utterly untrue assertion. He says the shareholders would not consent that an electric machine should be given to every end or party, as it would involve them in great expense, and that it would be a waste of time if the miner had to fetch the light for firing the holes from a distance of two to three miles. There is no doubt that the light cannot be fetched from a distance of even 200 yards, and that an electric machine must be given to every party. But do you think this could not be done, because such a machine costs 5*l*.? I think that if the use of any machine produces a saving which pays the amount of the purchase in two years, it is the duty of every intelligent man to use it, particularly if the comfort of the working man be thereby a little increased. In most mines the ends are worked by two parties of men, each party working six to eight hours. Let us suppose each party bores and fires four holes, this will give eight holes per day, and an average sum of 2400 holes per year. If the machine shall be paid for in two years, the 5*l*. must be assigned to 4800 holes, which involves 1-4800th part of 5*l*., or ¼d. on the firing of one hole. An electric fuse costs ¼d., or with the above-named expense for the machine ½d. The covered wires for a 2-foot hole costs ⅜d.: total, ⅞d. Whereas the firing of a 2-foot hole by common safety-fuse would be ⅜d. (taking the price of a coil at 6d.) The only question, therefore, is whether the profit by the electric ignition of one single hole amounts to (⅞d.—⅜d.)=½d.? Experience has proved that if a hole be charged with an electric fuse only two-thirds of the usual powder charge is necessary. For instance, if a hole of 20 inches would require 12 inches of powder with the safety-fuse, 8 inches of powder would be sufficient with the electric fuse. The reason is, that with the electric fuse the hole is rendered perfectly air-tight at the moment of the explosion, whereas with the safety-fuse the hole of the burnt safety allows the escape of the gas of 4 inches of powder before the stone tears. This fact is not astonishing at all, as everybody knows that time is necessary for communicating the least motion, even to a pin, and short as the time will be from the moment of the ignition to the moment of the explosion, yet the enormous pressure (35 times that of a high-pressure steam-boiler) will explain the loss. The value of these 4 inches of powder, which are saved by the use of the electric fuse, is about 1d. The increased expense for the ignition was ½d., so that there rests ½d. in favour of the electric fuse. It is thereby proved that even under the most unfavourable circumstances the miner will save ½d. by firing the hole with the electric machine. Although I do not think it necessary to prove that a hole can be charged, and fired by the electric fuse in the same time as by the safety-fuse, as no man, however strong he be, could work continually during eight hours, and that, therefore, a loss of five minutes in connecting the wires would be of no consequence, yet I may assert that a short practice will enable the men to fire a hole quicker with the electric fuse than with the safety-fuse, as no such care need be taken when tamping, and as the connection of the wires will be made by one man during the time his mate is charging the holes. I think I have now sufficently proved that the part of the question concerning money is in favour of the electric fuse, and will, therefore, proceed to consider whether it makes underground work easier to the miner. Your correspondent, "J. R.," says that accidents by blasting seldom occur, and if they do, the cause be the explosion produced by tamping, and that this could not be avoided by the electric fuse. Although I have some experience in blasting, I know only one case where a hole exploded by tamping (the hole was bored in quartz, and the fire, probably produced by the tamping-bar, had ignited the safety-fuse without the men being aware of it), but I know more than one hundred cases where the holes exploded partly by the use of a borer for scraping out a hole, which missed, and partly by the impatience of the men, who did not wait long enough after the ignition of the safety-fuse, or were prevented from escaping by falling. These latter accidents are impossible by the electric fuse, as the men can ignite this fuse from any distance just at the time they think the best for it. This is of great importance in a long, straight level, where the man has to run a great distance, having the burning hole behind him; should he tumble he would be severely hurt at all events. The same may be said if a hole is to be blasted in a shaft, or in a considerale height in a quarry. I may assure you that it is no pleasent feeling to be pulled up in a basket, when you know that death is watching and certain to catch you if your ascent is stopped in any way. If a hole which was charged with an electric fuse should miss the men can immediately resume their work, as it cannot explode any more; this is an important fact. The smoke is considerably diminished by the saving of the powder and safety-fuse. In short, if anyone would sum up all his wishes respecting the most convenient way for blasting a hole, he would find all of them fulfilled by the use of electricity.

I have shown at the beginning that a company which provides its miners with such machines can have the whole outlay paid back in two years by charging the men ¼d. more for each fuse. The only thing in the electric machine which can possibly be worn is the cat fur of the cushions. If it should be necessary to renew this the cost would amount to 1s. All the other parts—condenser, disc, cast-steel handle, and box—will be in the same condition after a use of 20 years. The cost of a machine, 24 insulating rollers, and 200 yards of galvanised iron wire, is 5*l*. 10s., and as by the charge of ¼d. on every fuse this outlay pays something like 50 per cent. interest, I think this would not be the worst part of the company's business, and no shareholder would object to the investment. F. ABEGG.

ALGERIA—No. II.

SIR,—Before dwelling on the marble quarries at Filfila, it will be necessary to attempt some description of the tranverse section of the land lying between the Mediterranean and the Great Desert of Sahara. There is not, perhaps, on the face of the earth a piece of country presenting a more fantastic outline than this, to say nothing of the extraordinary variety of animal and vegetable phenomena with which it is encompased. Nearly in the centre, about 60 miles from the seaport of Philipville, on a plateau of rock nearly 3000 feet high, and calculated by the Government authorities to be 2943 ft. 9 in. above the level of the sea, stands the city of Constantine. The site of this has evidently been rent from the surrounding mountain; the ravines stand open and fresh as if they were broken yesterday, and so deep that the traveller turns dizzy on attempting to look down into the river below. At one of the angles of these escarpments the faithless wives of the Musulman were wont to expiate their crimes by being hurled into the channel below. The rock is limestone, and the surface is so crowded with inhabitants—there being about 40,000—that the houses almost overhang the gulfs below. This is not the place to go into history, but it is hardly possible to omit saying that it is stated that this famous place has been besieged and taken upwards of forty times, the last time by the French army, about thirty years ago. Between this city and the sea, about half-way, the apex line through which the tunnel for the railway is now boring, and which has recently discovered a bed of anthracite coals, about 6 feet in thickness, rise two of the strangest looking mountains I ever saw, each very much in appearance like the Materhorn, so painfully brought into notice by the late frightful accident. I have not the exact height of these extraordinary mountains, but I think I shall not be far wrong in estimating them at 4000 feet and upwards above the level of the sea. I slept at a place called Cantour, or "El Cantara," which in Arabic signifies a bridge. Having arrived there in the middle of the night, the next morning I was astonished to find myself, apparently, on a picturesque island surrounded by a sea of mist. The mist lay long in the surrounding valleys toward Philipville, and nothing was visible but two horn-like mountains, about three miles north of my position. The tunnel was being driven in a dark shale, but, as far as I could see, the shale was enclosed in limestone.

About halfway between El Cantara and the sea, or something nearer the sea, passes a belt of sandstone, but it was principally of a light fawn colour, and I could detect no fossils to identify it. It lay upon the schistose slates of Stora; and on the next formation on the limestone, at El Mokera, by the margin of a large lake, called Fitzara, about twelve miles from Bonne, is now wrought a famous iron mine: this would seem to prove that the series was regular and unbroken. Then iron, lime, and coal here seem to betoken great future fortune for this part of Africa, and which the Government evidently deserve for the encouragement they give to mining and railway enterprise; but I only now allude to the presence of the metals as a proof that geological order prevails, and not for the purpose of describing the mines, a subject that must follow in its proper place. From El Cantara, southward towards Constantine, we first ascended a high ridge of limestone, about a mile off, from which we could see a beautiful landscape of hill and valley, fringed with cocoa palm, the first we had met with, and extending nearly to the foot of the rocks of Constantine; this ground was all in limestone. From Constantine southward towards the Atlas Mountains, at an elevation of about 4000 feet above the level of the sea, for from forty to fifty miles, extend the great plains of Old Numidia, the same that formed the corn fields of ancient Rome, and here, pasturing their flocks as of old, may be seen in abundant numbers the bernoused and tented descendants of Ishmael. The identity is so perfect, that in looking at them you almost fancy yourself reading a chapter in the Bible. From these plains you see, far away to the south on the Atlas ridge, mountains covered with perpetual snow, or at least I suppose so, for the atmosphere was very warm in the plains, and it was nearly at the commencement of the month of June. Throughout these vast plains were continually to be found the ruins of Roman cities and villages, and inscribed stones, with the letters perfectly legible, lay in every direction, together with fossil shells, declaring their origin to be of the chalk formation. Just at the foot of the Atlas Mountains, some 120 miles south from the sea, a little below Ain Cranchla, which is 5887 feet above the level of the sea, we came upon the hot springs called El Hurnam, or the Roman Baths; the water boiling from the rock here was too hot to bear one's hand in, and they would cook eggs. It is my opinion

that the water is heated by the falling together of a large copper lode and some iron beds that traverse the limestone here, and which I must refer to hereafter. ——— COPPER MINER.

IMPROVEMENT IN LEAD SMELTING.

SIR,—As an old smelter of lead ores, I read with considerable interest, and with some surprise, the letter of "A Mining Engineer," which appeared in last week's Journal, upon "An Improvement in Lead Smelting." The letter alluded to a new ore-hearth, which had been invented by Mr. Forster, at the Leadhills, N.B., but as it contained no description of the modifications introduced by that gentleman, it is, of course, impossible to form any opinion upon their merits. The account given "of the expense of smelting a ton of lead" by the two hearths is, however, so extraordinary, that one cannot but be very sceptical upon the whole matter. The items of expense are stated, and in one case 2 cwts. of coal and two loads of peat, costing together 2s. 3d., is the quantity and the cost of fuel allowed for converting (say) 26 or 27 cwts. of lead ore into 1 ton of metallic lead—and in the case of Mr. Forster's hearth, only 1¼ cwt. of coal, costing 10½d., is allowed for the operation. Now, surely there must be some great error here, and the quantities of fuel used must be considerably larger than those stated in both cases, or the coal at the Leadhills must be of a quality unknown in other districts, where from 9 to 12 cwts. to each 20 cwts. of ore are commonly required.—*London, Nov.* 14. ——— AN OLD SMELTER.

IMPROVEMENT IN LEAD SMELTING.

SIR,—Almost every branch of metallurgy, except lead, has made rapid and, in many cases, wonderful strides of advancement for some years past, giving our nation a pre-eminence in the arts and sciences far exceeding that of any other; and it is now very gratifying to find, from a letter in last week's Journal, by a "Mining Engineer," that lead smelting has at last become possessed of such talent as will, doubtless, shortly develope a fresh era in its history. He informs us that a Mr. Forster, foreman of the smelting works at Leadhills, N.B., has invented a new ore-hearth, which smelts continuously, without heating, as much lead per week as three of the ordinary hearths do; that it produces 4 per cent. more lead; that lead can be produced at 7*s.* 5d. instead of 10s. 2d. per ton, and that this would effect a saving in wages and fuel alone of 725*l.* a year in works where 2000 tons of lead are produced.

A "Mining Engineer" has omitted a little further data of some importance to enable us to arrive at a knowledge of the full extent of the value of this invention. It is this: What per cent. of lead was obtained from ore of a given percentage in the old hearth, and how many tons of ore can Mr. Forster's hearth smelt in a week of (say) 126 hours? I am told the quantity of ore which a Scotch hearth is capable of smelting varies from 10 to 48 tons in a week of 140 hours.

All praise is due to Mr. Forster; and, as 4 per cent. more lead represents something like 16s. per ton—lead being worth 20*l.* per ton—and if to this we add the saving in wages and fuel of 2s. 9d. per ton, without taking saving in plant into account, which in Truro is a very important item, we have a sum of 18s. 9d. per ton; and upon 2000 tons an aggregate amount of 1875*l.* a year!

To such men as Mr. Forster a bountiful hand should be held out, not only by his employers, but by the trade generally, for so valuable an invention; and it is to be hoped that he has had more sympathy from his employers than the late Mr. Snider had shown towards him.

Nov. 12. ONE WHO BELIEVES IN A DUE REWARD OF MERIT.

COPPER AND TIN MINES.

SIR,—It has been said that one extreme generally produces another—supply and demand govern prices. The extreme high price of tin and copper for some years led to an over production in these minerals in foreign mines, but at the present very low price of tin and copper the future supply must greatly fall off; but few of the foreign mines can pay with a standard below 120, or 16s. per unit. for copper. The cost of raising the ore abroad is so much greater than in Devon and Cornwall. I observe of late that copper ore, with a produce of 7 per cent., sells for about 3*l.* 15s. per ton, instead of 6*l.* 10s. or 7*l.* per ton as formerly; the cause of this, I am told, is the falling off in the supply to India, where the greatest demand formerly existed for our copper. All mines producing very low produce copper ore, say with a produce of 5 per cent. and below, must be incurring great losses to such mines, with such heavy working charges. It would be far better to let such low ores remain in the mines unsold for a time. Several of our extensive and formerly rich mines are now working at a loss to the shareholders, thereby making constant and heavy calls, and this ought to be avoided as much as possible, as calls from necessity have been so frequent of late, and in many instances without much chance of ultimate success. Many mines were started when prices of metals were high, that never ought to have been put to work, particularly old and exhausted mines. It has been said that some of the lords of mines insist on the company's working their mines vigorously, under pain of forfeiture of the leases. None but needy persons would insist on such conditions being carried out, as the loss falls equally on the lords with the adventurers. Lessen the supply as much as possible for a time, particularly low quality ore, and matters will right themselves shortly, as supply and demand govern the price.

A SHAREHOLDER.

RAMBLE THROUGH THE NEW CHINA-CLAY DISTRICT.

SIR,—On leaving Blisland I soon got on the DERL CHINA-CLAY WORK, where is to be seen a large kiln for drying the clay, and also pits, tanks, &c., laid out for permanency; they have a good bed of what we call the Potter's Clay, which will realise probably 27s. per ton, free on board. Here no machinery is required. The water comes in over the stope, which renders it easy to work. Probable cost of raising and drying not more than 6s. per ton; carriage to shipping port, say 9s.; I do not know the dues, but say 2s. 6d., which will make altogether 11s. 6d. per ton, leaving 15s. 6d. per ton clear profit. I think their returns are about 2000 tons per year, and will increase as the works progress. On going a little further south is the WHEAL ANNIE work. Here the water is pumped on the top of the stope of clay by means of machinery (water-power). Trial pits have been put down in this property for some acres over, some of them 40 ft. deep, clay not unbottomed, thus proving without any doubt that the work is one of permanency. The clay is of good quality; from samples taken it will realise about 20*s.* per ton. Raising and getting it fit for market, say 6s. 6d. per ton; carriage free on board, 4s.; dues, 1s. 9d.; other sundries, say 3d., which will make together 12s. 6d. per ton, leaving 17s. 6d. per ton clear profit. The first sale will be made here early next year, perhaps in January. They calculate to return the first year 2000 tons, which will leave 1750*l.* profit. As their works progress more clay can be sent to market; probably the second year their returns will be 3000 tons, and increase annually. I have heard it is an old saying that Cornish folks keep all the good things for themselves, but I find that two London gentlemen have been fortunate enough to get this work, which I was rather glad to hear, as I have no doubt some of the London folks have had a long pull from their purses in many of our Cornish copper and tin mines, since metal has been so low; but the time will come, and not far distant, when copper and tin will see a higher price, and many will again reap a rich harvest. But, I say, why stand idle and wait for this time to arrive, when it is to be seen that 40 or 50 per cent. on an average can be made in the clay works. Perhaps some may say that if many more works go on the markets will be glutted, but I am informed on good authority that if ten times the quantity were put on the market there is a sufficient demand for the whole. On my way back I passed through a small farm (Merryfield, I believe), in the parish of Temple. Here I saw several pits that have been put down by way of trial, all in good clay of the best quality (bleaching), which will realise from 35s. to 40s. per ton. This will certainly prove a good and profitable work, and can be worked without machinery. It is now getting to the close of the day, quite time for me to fix my compass to steer homeward, being well pleased with my day's ramble. CHINA-CLAY.

ST. JOHN DEL REY—DIRECTORS' REMUNERATION.

SIR,—The directors of this company having sent me the enclosed, will you be kind enough to insert it, with my reply thereto, in the Journal of this week, for the information of the shareholders. D. DULLEY.

"ST. JOHN DEL REL MINING COMPANY (Limited).—A resolution will be submitted to the general meeting on Dec. 12 for granting an additional remuneration to the directors of 1 per cent. on the dividends paid, whenever such dividends shall amount to 15 per cent. on the paid-up capital of the company."

GENTLEMEN,—I have received your circular, and in reply thereto (as you invite the expression of the opinion of the shareholders), I beg to state that, considering the present prosperity of the company, I see no objection to your increased remuneration, and yet cannot approve of the resolution about to be submitted to the shareholders. My opinion is, that the remuneration of the directors ought to be in ratio to the prosperity of the company, and that 1 per cent. is too much on 15, 20, or even 25 per cent. on the paid-up capital. Many a shareholder has paid 60*l.* per share, and even more; if he gets only 15 per cent. on the paid-up capital, he receives but 45s. per annum. The resolution I should think proper, and to which I would willingly agree, would be as follows:—One-half per cent. on all dividends from 25 up to 50 per cent., and 1 per cent. from 50 per cent. and upwards—15 per cent., is, I think, much too low.

Westfield, Wellingborough, Nov. 14. D. DULLEY.

EXTRACTION OF GOLD—RESULTS OF EXPERIMENTS.

At the Royal Society, Melbourne, two very interesting papers were read—one by Mr. CHARLES WILKINSON, of the Geological Survey Department; the other, on the "Extraction of Gold," by Mr. H. A. THOMPSON, for many years connected with the Port Phillip and Colonial Gold Mining Company, Clunes.

Mr. THOMPSON said:—The paper I have the honour to lay before the Royal Society has been compiled from my notes of experiments extending over the last six or seven years, and entered on with a view of diminishing the heavy loss of gold now sustained in reducing quartz. The greater portion of these experiments have been carried out at the Port Phillip Company's works, at Clunes, by the officers of the company, or in conjunction with them, and are the more important, as on that large establishment there is every facility for conducting the trials upon a working scale, while an assay office attached to the works allows of every step being tested with the accuracy which alone can make the results obtained reliable. It has long been known that a greater loss occurs in the treating of gold ores than is the case with any other metal; and, although this subject has attracted the notice of scientific and practical men for many years, the advance hitherto made has hardly been commensurate with the attention bestowed on it. In the old gold mining works of Europe and South America the loss runs from 25 per cent. upwards, notwithstanding the accumulated experience of several generations of miners; and, in California, Professor Silliman reports that his examination of tailings from the different works in the Grass Valley showed a loss of $80—say 4 ounces—of gold per ton; and he adds, "on the authority of one of the most experienced and cautious metallurgists of California, that the saving in a large number of cases was barely 30 per cent. of the gross contents of the ore, as determined by his own careful assays both of the ore and the waste." In this colony assays of tailings from many different gold fields have led me to the conclusion that the average loss sustained in crushing is not less than 35 per cent. of the total gold contents; or, at the lowest calculation, 1,000,000*l.* per annum. I doubt if any works are sustaining less than 25 per cent. loss, and several instances have come under my notice where there was a large percentage of sulphides in the quartz, and the loss of gold was in consequence from 50 to 70 per cent. of the total contents. It has been commonly asserted that this colony was far behind other mining countries in the adaptation of improved methods for extracting the gold; but, judging from the most reliable returns we can obtain, this certainly is not the case; and I think that, either as regards the character of our machinery, or the attention given to improved methods of treating the ore, we have no reason to be ashamed of the position we hold. It should not be matter for surprise that it has taken us 15 years to solve the problem which has baffled other gold miners four times that period, with all the resources of an old country, cheap labour, and cheap material at their command. For convenience, the gold found in mineral veins may be divided into two classes—first, the free gold, meaning that deposited in the quartz or slate in a form rendering it capable of liberation by the ordinary process of crushing; and, second, the pyritous gold, meaning that deposited with, and enveloped by, the sulphides of iron, copper, antimony, and lead, but principally with iron in this colony. The greater part of the free gold is deposited in particles large enough to be liberated and retained by the ordinary reducing process; but in all gold-bearing quartz a certain amount of fine gold exists, which cannot be retained by the usual mode of treatment; and in some few exceptional cases the proportion of this fine gold is so considerable as to form nearly one-half of the gold lost. This fine gold, when seen in the quartz, presents the appearance of minute patches of gilding, and must be detached in thin flat pieces, readily floated away in running water. A part may be pyritous gold, liberated in the breaking up of the iron ores. In practical working, some of this fine gold must always be lost, even where the greatest care is used; but a large proportion of that now carried away would be retained with the pyrites by any efficient mode of concentrating the latter.

The pyritous gold is so closely incorporated with the iron and other ores, that it cannot be separated by the means used for extracting the free gold. A question has arisen whether this pyritous gold exists in combination with the sulphides, or in a metallic state. Experiments made at Clunes, using hypo-sulphite of soda as the dissolving agent, showed a trace of other than metallic gold in rich pyrites, but none in auriferous antimony ore. In the first case the quantity was evidently so small as to be of no practical importance, nearly all the gold being mechanically deposited with the pyrites. A sample washed from the blanket strakes, in which the particles of pyrites average about 1-1000th of an inch in diameter, gold can be seen on the broken faces in still minuter particles; and I believe the great bulk of the pyritous gold is in this finely-divided state. Pyrites have been found in this colony containing 200 ounces of gold per ton, and in New South Wales over 2000 ounces of gold per ton; but these were, no doubt, picked specimens, and would not represent the average yield of the sulphides in the vein. I have, however, ½ ton of pyrites ready for treatment at the Good Hope Mine, holding nearly 100 ounces of gold to the ton, and wherever quartz veins contain a paying amount of free gold, and carry from 2 to 5 per cent. of pyrites, the latter is nearly certain to be rich in gold. I have as yet met with no instance where the yield of the pyrites was not in proportion to the percentage of it in the quartz, and the amount of free gold that could be obtained from the ore. From 10 to 40 ounces of gold per ton may be taken as the average yield of the sulphides in paying quartz mines, but both higher and lower yields have been met with. It is not the sulphides that exist in the quartz veins only that are auriferous. Many of the blue slaty beds, at a distance of several fathoms from the mineral veins, contain pyrites in scattered crystals, studding the rock. These crystals have been collected, and, on assay, gave from 5 to 15 dwts. of gold per ton. This fact may throw some light on the cause of quartz veins being frequently productive above and poor below the water line—a circumstance usually ascribed to the pyrites being undecomposed below the water. This cause is hardly sufficient to account for the sudden failure of the gold in depth, in some cases; and it is possible that the existence of large quantities of undecomposed pyrites in the adjoining slate beds may have an impoverishing effect, by holding the gold, and preventing its aggregation in the quartz veins. Hitherto, I have only referred to the sulphides found in the quartz or slate; but in the old auriferous drifts of Ballarat trunks of old trees are found embedded in the gravel, and on this old timber pyrites have frequently formed. A beautiful specimen of crystallised white iron pyrites deposited on a piece of wood, taken from a drift immediately below the trap rock, gave by assay 40 ounces of gold per ton. In another case where the old trunks were burst open, and only the sulphides formed in the heart of the tree were saved, the yield was over 30 dwts. of gold per ton. Some of the fine dust obtained in washing out the gold at the Royal Saxon claim, Ballarat, yielded by assay over 15 ounces of gold per ton. When placed under the microscope, this dust was seen to be composed of minute crystals of pyrites, aggregated into round pellets, from 1-300th to 1-100th of an inch in diameter, the surface being roughened by the projecting angles of the crystals, and unwaterworn. These results show that the deposition of gold along with pyrites has been in operation at a comparatively recent date, and is, probably, still going on. To enter into all the details of the researches made would extend this paper to too great a length; and it will be sufficient to state that careful trials, including assays of total contents, different modes of amalgamation to ascertain the amount of free gold, and microscopic examinations, indicated that the bulk of the gold lost was enveloped in pyrites, except in rare instances, not more than one-fourth of the loss being free gold, and this was usually small flaky pieces floated off with the water. The proportion of the free gold left in the tailings will depend on the fine or coarse particles in which it may have been deposited in the quartz, and also on the more or less perfect character of the means used for retaining it. A small percentage also exists in the form of gold still attached to particles of quartz. The plan first adopted by our miners was to roast the quartz in stacks in the open air, or in kilns, to oxidise the sulphides, and so liberate the gold, while the quartz was rendered more friable, and easy to crush. After several years' trial this system was given up, as it was found to be rather injurious than otherwise. At a low heat the pyrites in the interior of the quartz was little changed, while the free gold was coated with a film of some material, probably sulphur, which impeded the action of the mercury on it. When the roasting was carried on with a higher degree of heat, the oxide of iron formed on the exposed faces of the quartz acted as a flux, and a glazed surface of slag was formed, in which numerous minute globules of gold could be discerned under the microscope, similar to those found in the waste tailings when crushing roasted quartz. In the interior of the quartz black veins were formed by the melted mono-sulphide of iron, and other experiments led to the conclusion that a portion of the melted gold was diffused through these black veins in a form which rendered it more difficult to separate than when in its natural state. A careful experiment made on quartz roasted in a cupola furnace, with a superabundance of heated air, showed that the loss of gold sustained in crushing was at least 10 per cent. more than it would have been if the same quartz was crushed raw. Even if the pyritous gold could have been liberated previous to crushing the quartz, much of it would have been lost in the treatment found to be the most economical for extracting the free gold. These experiments indicated that the attempt to liberate the pyritous gold by roasting the quartz before it was crushed only increased the loss, and that attention should be directed to the separation of this pyritious gold from the sand, after the latter has passed the blanket strakes used for retaining the free gold. This entailed the necessity of operating on the waste tailings in bulk; and as this is the principle on which the attempt at improvements are based in the Californian and most other gold mines, it may be advisable to state the reasons which induced a different line of experiment. The first attempt to secure this gold was by means of fine grinding and amalgamating, with the following results:—By re-crushing the tailings with mercury in a Chilian mill, about 25 per cent. of the gold was obtained, with very careful working. In the arrastra with grooves in the bottom of the basin, for mercury, the return was increased to 33 per cent. of the assayed contents. Several other plans, based on the same principle of re-grinding the sand in mercury, gave similar results, and even with careful hand amalgamation, when the material tried was clean pyrites, we could not make much improvement on the above return. Dr. Percy, to whom this question had been referred, states that from pyrites containing 25¾ ozs. of gold per ton, he only obtained 8¾ ozs. when ground with mercury, but by roasting the pyrites before operating, he obtained nearly 25 ozs. per ton. A sample of rich pyritous quartz, tried by me a few months ago, was ground to a fine powder, and then rubbed up with mercury and hot water to extract all the free gold. The pyrites was then separated by hand washing, roasted and amalgamated, when it yielded at the rate of 140 ozs. of gold per ton. In the two last-mentioned cases the process was conducted with a care and perfection such as could not be carried out on a large scale by any machine at present known, and they are only quoted as a sample of numerous trials all tending to the same result, and indicating that decomposition of the pyrites was a necessary preliminary to any plan for extracting the gold profitably. The cost of this roasting, in addition to that of grinding, so increased the expense of operating on the waste tailings, that it was only in rare cases of exceptional richness where they could have been so treated with profit. But as more than 75 per cent. of the gold lost was in the sulphides, another course was open—to separate the sulphides from the comparatively worthless sand, thus reducing the bulk of the material to be acted on, and then to extract the gold. This is the system we have been endeavouring to bring to perfection for several years, and appears to be the only course at present known by means of which we can hope to reduce the loss of gold within reasonable bounds. [*To be concluded in next week's Journal.*]

MINING, METALS, AND MINERALS—PATENT MATTERS.

By M. HENRY, Memb. Soc. Arts, Assoc. Soc. Eng.

An application for Patent from the French firm PETIN, GAUDET, and Co., of Rive de Gier (communicated to J. H. Johnson), for rolling metals, appears in the recent list of applications; and an application relating to the same subject has been made by KIRK, of Workington. The following may be mentioned:—BAGSHAWE, furnaces.—SHAW, coke, breezes, and coal gas (communicated by A. C. Davies, of Liége).—DOERING, boring-engines.—BONNEVILLE (communicated by J. L. Vergniais and J. Appollinaire, Cheron), apparatus for excavating, scouring, &c.—HITCHINS and WOOD, cutting, dressing, moulding, and turning stone.—KORSCHUNOFF, manufacturing and casting malleable iron and steel.—ROUTLEDGE and OMMANNEY, cutting coal, boring rock, &c.; and HAWKINS, sculpturing.—CRAWSHAY and THOMAS have three applications for patents—one for extracting iron from scoria, and refining pig or cast iron; another for refining iron for puddling; and a third for treating titaniferous iron ores, extracting iron and utilising scoria.

Numerous Patents have been sealed, including the following:—No. 1405, FLEETWOOD, raising and stamping metal.—No. 1365, A. P. PRICE, fuel.—No. 1435, MESSENT, mixing concrete.—WHELPLEY and STORER have three patents sealed, respectively numbered 1471, 1492, and 1493, for fuel; a draft and spray wheel; and obtaining metals and saleable products from ores and minerals.

NAYLOR'S specification, No. 821, relates to a mode of consuming smoke in reverberatory, puddling, and other furnaces. He admits one or more jets of air to the interior from hot-air chambers or conduits, formed in the neck and roof or bottom or sides of such furnaces. He also proposes to admit one or more jets of air into the bottom or through the sides of the chimney-shafts. He describes an apparatus for inducing air, by the aid of steam-jets, and for collecting and carrying off the waters of condensation. This inducing apparatus consists of a pipe, with steam-jets and an air orifice, provided with a self-acting valve, which closes, or nearly so, when steam-jets are not on, but opens by the inflow of air when the jets are applied. The opposite end is branched; one branch conveys air into the air-chamber, and the other leads to an inverted syphon, partly filled with water. The patentee also describes self-acting contrivances for stopping the supply of the air-jets at the proper intervals.—DALBY'S specification, No. 832, is for apparatus for cutting coals and other minerals. The patentee describes an apparatus, in which he secures a cylinder, such as is used for compressed air-engines, to one end of the framework. Rotary motion is communicated to a vertical shaft, secured to the framing, and carrying arms placed opposite to each other, and having curved adjustable cutters fixed to them.—Another specification of a patent, No. 889, for an invention (communicated by MARTIN, of Paris, to C. E. Brooman), consists in transforming scraps or cuttings of steel and iron into cast-steel ingots, by first heating the scraps or cuttings separately to redness, then melting them in the presence of a clear slag in a bath of steely, hoop, or rubannée cast-iron, without a crucible, but directly in the furnace.—NEWTON describes (as a communication from P. S. Justice, No. 872) a power-hammer, in which is employed a metal spring and a flexible spring, for suspending the ram or hammer, when operated by a crank-shaft, so as to absorb the vibration in the flexible connection, and increase the effect and force of the blow.—BOGGETT'S provisional specification relates to manufacturing metal rods and bolts, by so shaping three segments longitudinally that when placed together and passed between rollers they shall be compressed inseparably into a solid cylindrical bolt, the inner segment or core being composed of iron or steel enclosed by the other two segments in a coating of copper. The core of both ends is made of copper or brass, to guard against oxidation.—An invention (communicated by BRAGGINGS, EWING, and EVEREST to Newton), for distilling petroleum and other mineral oils, refers to an arrangement for obtaining continuous feed in a vacuum still, and to a process of distilling in vacuo by the application of heat, by means of a steam-jacket, or by steam passing through coils of pipe or issuing from perforations therein. A mode is described for preventing overflow from the retort by a cylinder and chamber, and an arrangement for effecting the condensation of the oil is also claimed. Among recently-published specifications are two drawn by Mr. Henry, patent agent, Fleet-street; one for M. NORMAND'S clinometers and nautical instruments—for an arrangement in which a plate is poised or pivoted at the central part of a sphere, filled with liquid; the other is for M. ROZIERE'S cleansing agent (soap and solution) prepared from the bark of the quillaja wood.—The following specification may interest the hardware trade: Capt. WARRE'S has patented, No. 830, improvements in frying-pans and other frying utensils, consisting mainly in forming them with corrugated or channelled bottoms, and also in constructing double vessels, so arranged that they may be turned over, so as to be used on either side.

OBTAINING MOTIVE POWER.—The object of the invention of Mr. JOHN RAMSBOTTOM, of Blackburn, is to economise the use of steam. He proposes to employ two vessels, one of which answers the purpose of a low-pressure boiler, with a slightly weighted valve thereon, so that steam may readily escape when slightly in excess of the atmospheric pressure. The boiler is intended to heat the water, or other fluid, and to contain vaporous pressure sufficient to raise water contained therein into a valve chamber, wherewith to supply the second vessel, to be called a "convertor." In constructing a boiler and convertor jointly, he places the convertor within the boiler, the flames and heated gases from the fire heat the water in the boiler, and pass through a number of fire-tubes in the convertor to the flue. The convertor is made of strength to withstand excessive pressure, and is intended to change the liquid supplied thereto into vapour or steam of greater or less density, but of high temperature. An alternate connection or communication is made for the purpose of thus conveying the liquid in the low-pressure boiler to the convertor. A chamber is made, placed above the convertor, in which chamber is a valve having a cavity formed therein; a pipe leading from the liquid space in the low-pressure boiler conveys the liquid by pressure through an orifice in the valve seating to

fill the cavity in the valve before mentioned. This valve is then moved forwards until the cavity formed therein is brought over two other orifices in the seating, and both communicating with the convertor; one of these orifices passes to the upper portion of the cavity in the valve, and the other communicates with the lower part thereof, the object being to effect the discharge of the liquid more rapidly within the convertor by establishing an equilibrium of pressure (the liquid enters an evaporating basin placed within the convertor, this basin serving to retain within itself all sedimentary deposit), the lap on the valve being arranged so that one source of communication shall be closed when the other is open; or instead of a slide-valve he employs two or more lift valves, moved alternately by cams on a shaft; or the liquid may be injected by a force-pump into the convertor from the low-pressure boiler. The size of the cavity, or containing space within the valve, and the frequency of communications made from one to the other are arranged so that when at work the required rarity or density of vapour is maintained, and as this valvular apparatus is worked by the engine it will be properly regulated.

Meetings of Mining Companies.

EAST DEL REY MINING COMPANY.

A general meeting of shareholders was held at the London Tavern, on Tuesday, Mr. CHARLES MORRIS in the chair.

Mr. F. W. SMITH (the secretary) read the notice convening the meeting.

The report of the directors stated that when they met the shareholders in November last they had just received a very encouraging report, and also a considerable remittance of gold from the mines, and for several months immediately preceding the last meeting the returns of gold had been much delayed by two very serious accidents, one at the entrance to the mine, and the other in the main shaft. These accidents, however, had been repaired, and all looked promising for the future. The last month's produce had risen to 2650 oits., obtained entirely from the Morro Sao Vicente Mine, which was yielding at the rate of 6 oits. per ton of stuff. Under these circumstances, the directors were sanguine of the eventual success of the company, and felt justified, by the accounts received, in holding out to the shareholders the expectations which they themselves entertained. Almost immediately, however, after that meeting the yield of the gold stuff per ton began to decrease, owing to a disordered state of the lode. It is right, however, to mention that a statement has been made to the directors, to the effect that after working through the poor ground there is a manifest improvement in the aspect of the lode. Stone has been recently broken at the furthest point of the working, the appearance of which is the same as that procured formerly, and which yielded from 5 to 6½ oits. per ton, and this stone is considered by all the practical men in Brazil to whom it has been shown as a sure indication of an approaching good lode. During the year Capt. Treloar has executed a quantity of heavy work at the experimental shaft, near Fox's Mine. He has sunk a vertical shaft nearly 50 ft. in depth, to meet the bottom of which a diagonal shaft (Phillips's) has been driven, and it has been found that the stone at this point yields at the rate of 5½ oits. per ton, even at that short distance from surface, and had not orders been sent out to stop all expenses in another month Capt. Treloar would have been working on the lode. He has also secured the mining right to a tract of ground about four miles in length, adjoining the Morro Sao Vicente estate, containing a jacotinga formation, and which promised at the time of the cessation of works to be one of the most important features of the property. The directors, seeing that the capital of the company was rapidly being exhausted, wrote to Capt. Treloar on Jan. 8, pointing out the absolute necessity of bringing the returns and expenses more nearly to a balance. His reply was so strong as to the value of the property, and the injury that would result by stopping works, that the directors were induced to send out further credits to Brazil. As, however, the results continued unfavourable, the directors wrote more urgently, and desired Capt. Treloar at once to inform them what amount he considered would be required to put the mines into a profitable state. The following is an extract from his reply:—"The Morro Sao Vicente Mine is only one of the many mines in the property, and no company should confine their operations to one mine alone, for even a temporary decline in the auriferous quality of the ore affects materially the returns, as too truly demonstrated in our own case. Ere this I had hoped to have opened out mines westward of Sao Vicente, mines eastward, or Fox's Mines, and to have made more progress in exploring the jacotinga formation in the Serra Capaemma. Besides these, though I have seldom referred to it, there is another mine in the property of good fame. I allude to the Mine of Morro das Almos, which is also on the Morro Sao Vicente lode. The lode westward of Sao Vicente, eastward or the Fox's Mines, and the jacotinga formation cannot be developed under two years, nor under a cost of 30,000*l*. The Morro das Almos Mine cannot be developed under two years, nor for less than 10,000*l*. Looking, then, at the present state of the property, and the financial position of the company, I do not think the mines can be developed for the capital now at the directors' command. I am deeply sorry for this state of matters, but I have done my utmost for the company, and for my means I have a heavy stake in the concern." On receipt of this letter it was evident to the directors that any further expenditure of the small amount of capital at their command would be useless, and they accordingly wrote to Capt. Treloar, desiring him to suspend the works until the wishes of the shareholders could be ascertained. It now remained to consider whether additional capital should be raised for the purpose of further prosecuting the operations of the company, or whether the company should be wound-up voluntarily.

The CHAIRMAN said that the reports, which had been circulated among the shareholders, contained all the information the board had to communicate. It would be remembered that the last time he had the pleasure of addressing the shareholders the mine was beginning to assume a very favourable position, but since then there had been a series of ill-luck—first, the breaking in of the mine; and, secondly, the breaking down of the surface works, which rendered the operations much more expensive than when conducted without such interruptions. There was now no prospect of carrying on this company with success, although there could be no doubt they possessed a very valuable property: that was not only the opinion of their manager, but also that of every practical authority who had inspected it. Just as the directors had issued orders to reduce the expenditure, an improvement took place in the mine, the ore presenting exactly the same appearance as when it was yielding 5 oits. per ton. In the eastern workings, also, very favourable appearances were presented, and the last ore raised gave as much as 5½ oits. of gold to the ton. In addition to this, there was a very large tract of property containing what was known as the jacotinga formation, which was precisely similar to that in the Don Pedro North del Rey Mine and the Gongo Soco Mines; between these mines lay this portion of the company's property. But, notwithstanding all these encouraging features, the present financial position of the company was such that it was absolutely necessary some strong measures should now be adopted, and hence it was the directors recommended the alternative that the company be wound-up voluntarily, and the adoption of that course would not preclude the present shareholders from joining another company by which these mines could be thoroughly developed. Therefore, he would propose that the report and accounts be received and adopted, and that the company be wound-up voluntarily.—Mr. ROSS D. MANGLES seconded the proposition.

A SHAREHOLDER drew attention to the fact that the accounts were signed by only one auditor.—The CHAIRMAN said that the other auditor had retired.—ANOTHER SHAREHOLDER drew attention to the amount of the directors' remuneration.—The CHAIRMAN explained that the remuneration was fixed by the Deed: but notwithstanding that, as soon as the directors saw there was no reasonable prospect of the success of this company they ceased to take their remuneration.—A SHAREHOLDER supposed, if the company wound-up, the property would sell for something.—The CHAIRMAN said the present company might be resuscitated, or a new one formed. In the meantime, the directors had taken steps to have the mine examined by a competent authority, who was at present in Brazil, and whose report (which would probably be received in about three months hence) would throw great light upon the subject. In reply to a remark with regard to the arrears of calls, he stated that the amount had been reduced to 4600*l*. since the date (June) at which the balance-sheet was made up, and of the remainder a large proportion was due from one shareholder, whose estate was in Chancery; that amount was sure to be recovered, but some of the arrears due could not, he thought, be claimed.

Mr. PAWLE (who appeared for the largest shareholder) asked if the board had thought of any practicable scheme that could be adopted in the present emergency, other than that of winding-up?—The CHAIRMAN said the board considered the best course was to wind-up.—Mr. J. FIELD said that although it appeared from the balance-sheet the only alternative was to wind-up the present company, yet he did not think the shareholders should be left in ignorance as to what future course was proposed to be adopted. There appeared to be two modes—the formation of a new company, or the disposal of the property to some existing company. He was not disposed to think the shareholders would be justified in casting blame upon the directors for the company's present position, for probably circumstances had arisen altogether beyond their control, but he did think the shareholders had a right to look to the directors to indicate the course that was best to take.

Mr. SCOTT said he had recently come from the Brazils, and had had an opportunity of conversing with several gentlemen in Pernambuco. He was sorry to say those gentlemen knew very little of the company's property, and therefore advised him to sell his interest.—A SHAREHOLDER had no doubt Mr. Scott was stating that which was correct, but at the same time shareholders should bear in mind that some people might have an interest in advising the sale or abandonment of the property.—Mr. SCOTT said he had no interest whatever.—Mr. WRIGHT said he could recollect that the same thing was said about the Real del Monte Mine, which afterwards proved such a wonderful success.

The CHAIRMAN said the information communicated by Mr. Scott was of a very negative character, for it appeared the gentlemen referred to knew nothing of the property.—Mr. J. PHILLIPS said an opinion expressed by gentlemen residing in Pernambuco about a mine near Rio de Janeiro, of which they admit they have heard but little, could not be considered of much value. All the information the directors were able to obtain from Rio de Janeiro was of a different character—indeed, he might mention they had had the evidence of two highly respectable gentlemen (a partner in the house of Messrs. Schusters and Stern, and Lord Dundonald), who saw the mines, and they testify to the miner-like way in which they were being developed, as well as to the satisfactory manner in which everything was being conducted. No one could possibly say whether the mines were likely to prove rich or poor until they were thoroughly examined; the mine agent judged by indications presented by the ground opened out, and therefore no value could be attached to the opinion of those gentlemen to whom reference had been made, however respectable they might be. (Hear, hear).—Mr. CROPP thought the shareholders had better direct attention to the business of the meeting than to any hearsay that might be brought forward.

Mr. MANGLES, in reply to a remark from a shareholder, stated the board believed that in Capt. Treloar the company had an able miner and an honest man, and holding as he did a considerable stake in the undertaking was interested in bringing the mine into a profitable condition. There was no doubt a great probability that by continuing the operations large and profitable returns would be made, but on the other hand the capital of the present company was exhausted.

Mr. J. FIELD said it would appear, from what had passed, that the board had lost faith either in Capt. Treloar or in the property. If such were not the case, it seemed a pity that the directors had not distinctly stated so. There were strong financial reasons why the present company should be brought to a termination, but he did not know why the directors had come to the conclusion that the shareholders would not advance further funds, if there were sufficient grounds for so doing were adduced. Either the directors did or did not believe in the propriety of further conducting these mines. If the prospects justified a continuance, the directors should have distinctly stated so in their report.—Mr. J. PHILLIPS thought the hon. proprietor could not have read the report of the directors, or he would have seen that Capt. Treloar's reply to the directors distinctly stated that it would cost 30,000*l*. to develope three of the mines on the property, and 10,000*l*. the fourth mine; and, after quoting the letter, the directors stated that either fresh capital should be raised for the purpose of carrying on the operations of the company, or it must be wound-up. Therefore, the course was clearly indicated in the report, for either the shareholders must raise further capital, or (the necessary alternative) the company must be wound-up. The board had the most implicit confidence in Capt. Treloar, and a report from any other authority could not alter the fact that money would have to be provided for working the mines of the company.

After some further discussion an amendment was proposed, to the effect that the meeting be adjourned until after the receipt of the special report upon the company's mines, which, having been duly seconded, was put and carried; the motion for the voluntary winding-up of the company was consequently lost.

The CHAIRMAN said that as soon as the report was received the directors would convene the shareholders together, to determine what course should be adopted.

The proceedings then terminated.

CARADON CONSOLS MINING COMPANY.

A general meeting of shareholders was held at the office, Austinfriars, on Thursday,—Mr. BUCKLAND in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

A statement of accounts was submitted, which showed a debit balance of 130*l*. The report of the agent was read, as follows:—

Nov. 13.—Since your last general meeting the progress made in the various points of operation has been as follows:—The 80 east end has been driven 2 fms., which has produced some saving work throughout. In the present end the lode is split, or what is more likely, the two lodes which have been in contact from the cross-course have again separated, leaving the south part, or the Clymo's lode, of a very promising character, although small, producing some good stones of ore; this end is now about 25 fms. from the east boundary. The 80 west end, on Clymo's lode, has been extended 8 fms., the lode throughout this drivage has been more or less disordered, and has varied in width from 9 inches to 2 feet; the lode produces some good ore throughout occasionally, worth from 3*l*. to 5*l*. per fathom. From the direction of the lode in the last few fathoms driving it is doubtful whether there may not be more lode still to the north; this I think advisable to prove by a few feet cross-cut the next time we take down the lode, if the direction continues as at present. This end is now about 300 fms. from the west boundary, consequently the Clymo's (as well as the other south lodes) has a run of nearly 400 fms. through the sett. We have opened out some 9 or 10 feet on a lode a few feet south of Clymo's from the main cross-course, and also intersected it by a 5-fms. cross-cut, 21 fms. to the west; this cross-cut is also in connection with a small cross-course. I think this lode is the one known as the "main" lode in South, and "Allen's" in West Caradon; we have found it from 6 in. to 1½ ft. wide, containing some good stones of ore, gossan, and fluor-spar. Twenty-three fathoms to the north of Clymo's lode is a strong well-defined gossan lode, 2 ft. wide; this lode was opened on 3 fms. so far west as the west part of the cross-course some time ago, and during the past week or two we have cut it beyond that part of the cross-course, and find its character and size very similar, and in addition the joints in the granite on the side of it are coated with copper; this looks promising in connection with a strong gossan; north, and as the Clymo's lode has a 3 feet per fathom underlie in the same direction, those two lodes appear to form a junction some 6 fms. deeper. After the communication was made between the winze below the 54 and the rise above the 80, the ventilation in the mine became generally good. We at once commenced to sink a winze below the 80, as a continuation of the winze and rise above, so as to be made available for a shaft, if required. The winze is now about 10 fms. deep, therefore I think it advisable to commence forthwith to open out on the lode on each side of the cross-course, and should it show an improvement at that level, which I think it will, as it leaves the influence of the cross-course, it will soon be found necessary to sink a shaft to the 54, in connection with the rise and winze referred to. This 54 fm. level is, in reality, not over 30 fms. perpendicular from the surface, and as the ground is apparently easy for sinking it will not involve any very great expense. In addition to the various points referred to, which I should recommend being continued, we are making some further search amongst the southernmost branches intersected for the Jope's lode by two men, and are stoping some of the ore ground above the 80, from which we expect to obtain about 150*l*. worth of ore for the next quarterly sale.—S. BENNETTS.

The CHAIRMAN said that he had much pleasure in meeting his co-adventurers upon the present occasion, as it afforded him an opportunity of congratulating them upon the greatly improved position and prospects of their property. He had great pleasure in informing them that they had entered the Ticketing List, and, according to the agent's statements, the samplings would be kept up quarterly. From a letter just received, the lode in the 90 was producing fine black ore, justifying the hope there would be a great improvement; and there were also many other lodes south of the cross-cut yet untouched.

Mr. R. HAWKE (of Liskeard) expressed a most favourable opinion of the general prospects of the mine.—A SHAREHOLDER saw no reason why Caradon Consols should not prove equally productive with the other Caradons. There were elvan courses, and six or seven lodes which traversed the ground within 30 fms. of each other—a circumstance almost unparalled in mining. The cost of the mine did not exceed 180*l*. per month, which a very small quantity of ore would liquidate. He felt convinced that another level would place them in a very favourable position.

Mr. KING was much pleased to see that upon the present occasion the total liability did not exceed 300*l*., and the arrear of call was only 25*l*. His opinion of the property could be best formed from the fact that he had purchased one-tenth of the entire mine, which he held as an investment, feeling satisfied that if the mine be developed with economy and vigour it would prove a paying concern. There were hardly any water charges, and all the necessary machinery was erected, so that there was no additional expenditure to be incurred: 50 tons of ore would give them a considerable monthly profit. Everything was being done that could be done, and he had great confidence in the ability of their present manager, who had a very favourable opinion of the property. He much regretted that some of the old shareholders, who had been interested in the mine for many years, had sold their shares, for it was to be remembered that 20*l*. per share would be only 18,000*l*. for the mine, while East Caradon at one time sold for 300,000*l*. He then read a letter from a local shareholder, in which the value of the shares was estimated at 40*l*. to 50*l*.

The report was adopted, and ordered to be entered on the minutes, and the accounts were passed and allowed.—A call of 10s. per share was made.

The committee of management was re-elected, with thanks for past services.

A vote of thanks to the Chairman terminated the proceedings.

PRINCE OF WALES MINING COMPANY.

A general meeting of shareholders was held at the offices, St. Michael's House, on Thursday,—Mr. J. Y. WATSON, F.G.S., in the chair.

The notice convening the meeting having been read, the minutes of the last were approved.

The accounts (estimating the cost up to December) showed a debit balance of 1079*l*. The report of the agents was read, as follows:—

Nov. 14.—Since the last general meeting Watson's shaft has been sunk 5 fms. 3 feet, being now 10 fathoms below the 45. We have cut into the east end of the shaft in the 55 fathom level 4 feet; also driven south 4 feet; north, 3 feet; pent-house taken out, and the men are now engaged in casing and dividing the shaft from the 45 to the 55. When this is completed (in a few days) we shall continue the cross-cut south to the lode, and north also to intersect a lode which cannot be far off this level. The 45 has been driven 10 fathoms, being now 21 fathoms east of the cross-cut. The lode has for the whole drivage varied in size from 1½ to 4 feet wide, and averages 30*l*. per fathom in value. The lode has been all taken down close to the end; it is now disordered by a horse of killas, between two small branches, 6 inches wide, and is now worth 5*l*. per fathom. From present appearances, the lode will resume its former size and value within a few feet further driving. The rise in the back of the 45 fathom level, 12 fathoms east of the cross-cut, is now 5 fathoms 2 feet above the back of this level; the ground is favourable for rising. This is being put up on the north part of the lode, so as to communicate with the winze from the 30, but the orey part of the lode is the south part, and worth 15*l*. per fathom, and stands whole to the south of the 30 fathom level. We do not intend taking down any more lode before communicating with the 30 fm. level. The 45 west has been driven 4 fms. 3 ft., and passed through the cross-course, which is 8 feet wide, and intersected the lode west of the cross-course, where it is full 5 feet wide, composed of quartz, capel, peach, and arsenical mundic, with good stones of tin and copper, worth for the latter 1½ ton of good ore per fathom. We consider it much more valuable for tin than ore, but until the stuff from the cutting through is drawn to surface, and a sample taken, we cannot name its value, but we have no doubt, from the appearances in the 30, west of the cross-course, and the character of the lode now seen in the 45, that a fine course of ore will be met with within a short drivage. In the 30 east we have driven 2 fathoms 5 feet. The 30 west has been driven 4 feet 6 inches. These two ends are suspended, and the men put to sink a winze in the bottom of the 30 east, to communicate with the rise in the back of the 45; the ground in the winze is very hard and spare for sinking, the same being now 3 fathoms below the 30. We have erected a hauling-machine, put in crusher, &c., which is working very satisfactorily, and we hope to have 60 tons of copper ore for sale by the end of this month. Looking at the ore ground laid open, and the prospects in the 45, both east and west, also the 55 east and west, and the northern lodes, we must congratulate the company in possessing such a valuable property.—JOHN GIFFORD, WILLIAM GIFFORD.

The CHAIRMAN said that the accounts just submitted, including every liability up to the present time, showed a debit balance of 329*l*., but in accordance with the suggestion of one of the largest shareholders—Mr. W. A. Thomas, Chairman of the Devon Great Consols—the committee had estimated the costs of the current three months—that is, up to the end of December—which brought up the total debit to 1079*l*., and it was proposed to make a call to liquidate the amount. He need hardly say that Mr. Thomas, before he determined upon the purchase of 2000 shares, had the mine thoroughly inspected, and satisfied himself as to its great value as a speculation, and he was happy to announce that he had agreed to become a member of the committee of management. (Hear, hear). As false rumors had been circulated as to heavy outstanding liabilities, he might repeat what he had already said, that the balance-sheet just submitted included every liability up to the present time and estimated to end of December.

Captain GIFFORD, in reply to questions, stated that the 60 tons of ore about to be sampled would, with the present standard, realise about 6*l*. 10s. per ton. It was obtained from 11 fms. driving, and not an inch of ground had been stoped since the last meeting.—Mr. ROSEWARNE said he had had the mine inspected by several eminent practical authorities, the whole of whom had valued the lode at 35*l*. per fathom, which Capt. Gifford valued only at 30*l*.

The CHAIRMAN said the fact that Capt. Gifford had undervalued the lode was proved by results.—Mr. F. LANE asked what amount it was estimated the ore would realise?—Capt. GIFFORD said about 500*l*.—Mr. F. LANE said that also proved the correctness of Mr. Rosewarne's statement.—Mr. PETER WATSON asked when it was estimated the lode in the 55 would be reached?—Capt. GIFFORD computed it would be cut in about five or six weeks hence. The level was being driven by six men, at 7*l*. per fathom. He further stated that if the main lode continued its present underlay the cross-cut would intersect it in about 8 fms. The fact that it was going down more perpendicularly was admitted by all to be a most favourable feature.—Mr. EDWARD COOKE asked if some good results were not expected from the cutting of a lode which had been worked on the back by the ancients?—Capt. GIFFORD replied in the affirmative, and stated that it would be reached, he thought, in about a month.

Mr. ROSEWARNE said that lode had never been seen, although, from its appearance at surface, it was equal to that now being driven upon.

Mr. GOMPERS had understood it had been beaten away by the ancients at surface.—Mr. ROSEWARNE said it was a parallel lode, and affected by the same cross-course. It would, no doubt, form a junction with the other lode; indeed, it might be said to be the same lode, divided by a horse of killas.

Capt. GIFFORD said that, taking every point into consideration, the mine generally looked very much better than at the last meeting, (Hear, hear.)

Mr. ROSEWARNE said that his information was to the effect that the general appearance of the lode west of the cross-course was quite as good as it was east.

Capt. GIFFORD mentioned that the cross-course in the 30 was only from 3 to 4 ft. wide, but in the 45 it was from 7 to 8 ft.

The CHAIRMAN said Capt. Gifford was of opinion that the 45 east would in a few feet further driving be as rich as ever; but supposing, for the sake of argument, that they were at the end of the bunch in the 45 east, everyone must admit they had gone over a fine course of ore for 21 fms. in that direction, and it was now coming in rich west; it was the opinion of those who had inspected the mine that the lode would not only be cut richer at the next level, but that the ore ground would lengthen eastward.

Capt. GIFFORD said that the lode in the 45 west was considerably improving.

Mr. E. COOKE asked if the lode had been "backed?"—Capt. GIFFORD said it had been "backed"—that is, worked near the surface—by the ancients for ¾ mile in length.

Mr. E. COOKE said the reason he asked the question was because it had been stated that some fine stones of ore had been taken out at a distance of half-a-mile from the present workings.—Mr. ROSEWARNE expressed a confident opinion that there would be a very good lode west of the cross-course.

Mr. PETER WATSON enquired the bearing of the lode?—Capt. GIFFORD said it was from 18° to 20° south of east, and no doubt went into the Drake Walls sett.

Capt. GIFFORD said it was a splendid-looking lode, and was everything but a course of ore. There were about 200 fathoms before the boundary was reached, and nearly three-quarters of a mile in the opposite direction.

The CHAIRMAN, referring to the question of call, stated there were three shareholders, holding one half of the mine, who were unanimous that the call should be made of a sufficient amount to pay off the present debit balance, and provide for the estimated cost up to the end of December. He stated there were no less than 10,000 shares represented at the present meeting.

After some discussion as to the proposed call, the accounts being passed and allowed, Mr. E. COOKE proposed, and Mr. GOMPERS seconded, a proposition to the effect that a call of 1s. 6d. per share be made, which was put and carried unanimously.

Mr. W. A. Thomas was unanimously elected a member of the committee.

Capt. Gifford was appointed the manager of the mine.

A unanimous vote of thanks to the Chairman terminated the proceedings.

EAST PROVIDENCE MINING COMPANY.

A meeting of adventurers was held at the mine, on Wednesday, Mr. T. HOLLOW (the Purser) in the chair.

Mr. HOLLOW read the following statement of accounts and reports of the agents:—

The three months' accounts to the end of August show:—Balance from last account, 444*l*. 2s, 9d.; labour, 723*l*. 19s, 3d.; sundries, 9*l*. 1s. 3d.; merchants, 195*l*. 12s.—1372*l*. 15s. 3d. By call made Aug. 7, 582*l*. 4s. 1d.; by 12¾ tons of tin sold, 623*l*. 2s. 9d.: leaving a balance against the mine of 167*l*. 7s. 5d.

Boorman's shaft is down to the 94, where the lode has a better appearance than in any other place below the 82, and yields tin to save. We have now commenced driving the 94 east and west. The 82 is driven 24 fms. east of Boorman's shaft; the lode in the end is improving, and appears to be getting into good tin ground. The winze below the 70 east is sunk 7 fms., and has passed through a good bunch of tin ground, of a carbona-like character, which is making off north-east, and is worth from 12*l*. to 15*l*. per fm.; we expect to communicate this winze with the 82 before the end of the month. The 70 east is now well ventilated (by a rise being put through to the 60), and we have resumed the driving where the lode, though disordered by a crossing, yields tin to save, and is likely to improve. The 50 east is worth 6*l*. per fm., and is opening up good tribute ground. We have now four pitches in the 50 fm. level, seven in the 60, and five in the 70—altogether 16 pitches, working by 35 men, at tributes which, at the present price of tin, will average 11s. in 1*l*. The mine is improving; our sales of tin this quarter have exceeded those of any preceding one, and if our present prospects continue, the quantity in the coming quarter will be still greater. The new steam-stamps work well, and we are getting on with the dressing-floors as fast as possible. We have pleasure in directing the attention of the adventurers to the improved prospects of the mine, and think the time is not far distant when it will be not only self-supporting but profitable.—J. NANCARROW, W. WHITE.

The PURSER congratulated the shareholders on the improved condition of their ledger and of the mine generally. In the present state of their funds, and of East Providence, and with anything like the past price for tin, their speculation would soon be remunerative; indeed, under present circumstances he was hopeful, and so were the agents, that an increased quantity of tin next quarter would about make the accounts balance. (Hear, hear.) After many years of patient toil, and of, in the greater number of cases, prompt response to calls, this was very cheering news, and he sincerely trusted their expectations would be realised. The agents would be happy to answer the questions of any shareholder. He might add, however, that the merchants' bills would be a little heavier next quarter, in consequence of the necessity of adding to the stamps-floors; but all known liabilities were charged up to last quarter. (Hear, hear.)—To pay off the balance of 167*l*. 7s. 5d. a call was made of 10½d. per 3986th share, and for the further prosecution of the mine 7½d. per share, making 1s. 6d. per share, with a discount of 5 per cent. on all payments within 21 days.

Mr. J. HARVEY (of Hayle) asked Capt. Nancarrow whether the tin ground was extending east, in which direction they had an extensive sett?—Capt. NANCARROW said, yes; and, in answer to further queries from Mr. Harvey and other shareholders, added that the ground in all the levels, so far as opened, would pay. The 50 was about 42 fathoms east of the shaft, the 70 was 45 fathoms east, and the 60 was 57 or 58 fathoms east, and the tin ground continued in that direction in every level. As the shaft went deeper also it was lengthening into eastern ground. The bottom of the winze, referred to in the report, was of a carbona-like character, and was productive, but as yet not to any very great extent. The carbona was going away north-east, and would be followed after the winze was put through. If the other parts of the mine, however, continued to improve this might be held in reserve, and hereafter worked to more advantage, as they paid only 3*l*. per fathom for rising the winze, and 6*l*. for sinking, and there was only 4½ fathoms between the two parties of men. The ground was the same, but hauling the stuff and the water, which just here was rather plentiful, made the sinking more expensive than the rising.

Mr. R. H. BAMFIELD: You say the lode in the shaft is yielding tin. Can you say any value for it?—Capt. NANCARROW: No; we cannot. We pay 20*l*. per fathom for sinking the shaft now, but the average is 16*l*. and 18*l*. per fathom. Our mine generally being so dry, although we are 94 fathoms deep, our lifts only go to the 70. That is a peculiarity of this district. At St. Ives Consols, 200 fms. deep, they have an 8-in. pole, 7½ ft. stroke, and take the year through work 4½ strokes a minute. At Margery, where they are in the greenstone, they have more water, I suppose, than all the rest of the mines in the parish. At St. Ives Wheal Allen they have a 5-in. or 6-in. pole, which keeps the water at about two strokes a minute. At Rosewall Hill they have hardly any water. If our work extends to the junction of the greenstone we also may have more water. In St. Ives Consols our tin made up to the greenstone, but not in it to any great extent. I may say, with regard to the mine generally, that my impression is not altered from the first day of my connection with it; I thought it would turn out to be by-and-bye a mine that would not only pay but remunerate the adventurers very well. (Hear, hear.) I think this still, and my confidence strengthens the further we advance with the undertaking. (Hear, hear.) We are not yet at depths where we may expect the richest tin, for we are only 30 fms. deep as compared with Providence; I think we have every reason to be satisfied with what we have seen so far as we have gone, for the mine is opening very well; the eastern ground looks also very well; the lode looks better in the bottom, and, like Dr. King, in mining, we can only combine the whole of these advantages into a paying mine by time and development. (Hear, hear.) We are working in every way for the advantage of the property and the interest of the adventurers. With regard to costs, we are cutting them as close as possible. I do not see how we can pull the rope much tighter than now, except that after our floors are finished we shall have a reduction in our merchants' bills, especially in timber. We may work the mine at about the same cost next quarter, but that depends on the number of tributers; and, of course, if more tributers work, we shall have more tin. I must congratulate the adventurers that we meet under better circumstance than we ever did before. We have gradually increased our quarterly returns of tin from 7, 8, and 9 tons a quarter to 12 and 13, and that is a sensible difference in a small mine; and I am bound to add that we have done this, not by any extra exertion, but simply by the fortunate, gradual, and, I trust, permanent improvement of our mine. (Hear, hear.) We shall do as well, and better, the coming quarter; at any rate, having looked at the matter very calmly and considerately, Captain White and I think, according to present prospects, the time is not very far off when we shall cease to make calls. (Hear, hear.) This is so far as we can see, and you must accept it in the sense in which we speak, and subject to the uncertainty connected with all these things. So far as we can see, the mine is opening up very well. The agents get on very pleasantly with the adventurers and the committee, and the sole drawback to our otherwise agreeable connection is the poverty of the mine, and the closeness with which we have had to work. But I believe we have seen the worst of our days, and I trust we shall come to the end of our gloom very shortly. (Hear, hear.)

Votes of thanks to the purser and committee were passed and duly acknowledged, and the latter were re-elected.

THE HIGHEST CHIMNEY IN CORNWALL.—In August, 1865, Mr. C. Remfry, manager of the Par Works, laid the first brick upon the granite base of the stack for the enlarged lead smelting works at the busy port of Par. On Saturday last the manager laid the last brick on the top of the chimney, which rises to a height of 237 feet. The stack is erected at a considerable distance from the furnaces, and the long flues are constructed so as to catch the valuable lead fumes that at present go off in smoke. It is calculated that in three years silver and arsenic enough may be collected in this way to reimburse the outlay in building the stack of flues. On Saturday a treat was afforded to some visit-

ors at the works, when a silver plate, weighing 9500 ounces, and worth 2600l., was taken from one of the furnaces. The mass (of a pear shape) was cut into four pieces, packed in boxes, and sent to the Royal Mint. Mr. Tregenza, foreman of the furnaces, resides on the works, and kindly affords every information.

ON COAL, AND COAL FORMATIONS.

Mr. D. PAGE, F.G.S., of Edinburgh, delivered a course of three lectures at the Literary and Philosophical Society of Newcastle-upon-Tyne, on "Coal, and Coal Formations." The lecturer, after introducing his subject, said that no doubt people were too apt to take their impressions from the neighbourhood in which they resided; but really they could only know their own position rightly by a comparison of it with other neighbourhoods, and that in future lectures he should fully explain what coal was in our own district, and what it is in other places. As to what coal was, he said they were all acquainted with peat or moss, and peat was the first formation of coal, and from the top it went downwards, becoming harder in its several stages. This he explained by several diagrams hung on the screens, which showed the recent, middle-aged, and ancient—or tertiary, secondary, and primary formations. He explained that peat grew in all temperate climes; but in the southern, or oceanic, countries it did not exist. Peat was merely vegetable matter altered according to its age and the plants of which it was composed; and if they understood aright the nature of peat they would have little difficulty in understanding the nature of coal. There was no chronometer, however, for deciding upon the age of peat. Canoes had, however, been found imbedded deep in the turf, and stone arrow-heads had been found in the canoes, and that was in itself some guide to the time which had elapsed since the peat had been in course of formation. What time, then, must it have taken to form one bed of coal in our own neighbourhood? He then spoke of the probability of peat becoming in greater use among the peasantry than is at present the case, in the event of coal becoming scarcer, saying it might be obtained at a cheaper rate than second or third rate coal. The second stage of peat, or lignite, was explained, and specimens of the brown coal of Austria exhibited to the audience. It was rapidly assuming a true coal character, but still it was full of wet, because it had not undergone enough of chemical change. He referred to the coal of the chalk regions, and gave explanations of it, and then passed on to the formation of our own coal fields, and said that they were of vegetable growth. Many of them, however, were drift, as might be seen in some mines by the mixture of sand, ironstone, and other foreign substances with the coal. Cannel contained a large quantity of ash, as much as 28 per cent., and yet it was rich in gas and oil. Cannel he believed to be nothing more than macerated vegetable matter, for in it were found the best specimens of great fish bones. In speaking of the varieties of coal, he said they were caused partly by the conditions under which they had been buried, and the kind of plants of which they were composed. Another cause of difference would be the amount of muddy matter that may have been mingled with the mass, and the rapidity with which the vegetable mass had been covered up. The lecturer next entered into details of a scientific nature, giving lucid explanations, however, of his meaning as he proceeded, particularly as to the Old Red Sandstone formation.

The second lecture was on "The Old Coal Measures." Mr. Page commenced by referring to a geological map of the British Isles, representing the situation of the different coal fields in South Wales, North Wales, Staffordshire, Lancashire, Derbyshire, Newcastle, Whitehaven, Mid-Lothian, Fifeshire. If it had not been for these it was, he said, extremely questionable whether Great Britain would have been what she is. True, they possessed Saxon courage and perseverance, which might go far to make them great; but he maintained that, without their coal fields, neither mechanically nor commercially would they have enjoyed the prosperity or the supremacy for which they were so famous. Their iron enabled them to construct railways, and machinery, and ships; but it was to coal that they were indebted for the means of getting up the steam for the motive power. If, then, they had profited so much by that product, it surely was worth their attention in a scientific and geological point of view. He then spoke of the rock system, considering, in relation thereto, the different strata or formations, and the life period, in connection with which he regarded the fossil plants and animals which formerly lived and flourished, and had been found embedded in the earth. As to the third point, the treatment of the coal fields as a sort of industrial repository, with the view of showing what they owed to them, he should leave it for his next lecture. Starting, then, with the rock system, he expressed the opinion that it was very simple, and might with patience and energy be mastered almost during a long summer's day. There were the sandstone, the shale, the ironstone, and the limestone, which terms need no explanation, and might be found in the sinking of a pit shaft of any considerable depth in South Wales or elsewhere. Thousands of ages must have passed away since these formations took place, and land and water must have changed their relative positions, and undergone different distributions; climate must also have altered, and possibly there had happened eruption and disturbance. They could, however, divide these formations into three or four great stages as lying between what the English plainly called the Old and New Red Sandstone—namely, the lower coal measures, the carboniferous or mountain limestone, the millstone grit, and the Upper Coal Measures. The mountain limestone betokened marine conditions, and the millstone grit the crustacean and reptilian. Looking, then, at the paleontological part of the question, they found, after the sea weeds and the fungi, beautiful specimens of ferns, more like those of New Zealand, or sub-tropical climates, than our own, and stems of plants. From the floral or vegetable world they passed on to consider the animals which abounded in these formations, under the name of water-dwellers, which included the "corals" and fishes. The latter, singular to observe, were generally found with an unequally lobed tail, unlike the specimens now-a-days, thus indicating the progress which had taken place—which led them almost to believe that there was a plan in process of development, and that there yet might be a more perfect consummation. It was also remarkable that no creature other than those belonging to the reptile class had been discovered, thus leaving it a question whether birds existed. These formations showed that as individuals began life, declined, and died, so did the families, orders, and classes of animals of the day spring up, flourish, and die; and as they differed with those that succeeded, it seemed to be a part of the great scheme of creation never to make them again, but to show an improvement in the species which they had now before them. He expressed his regret that men of science had lacked the perseverance, not the ability, to make progress in the floral field as they had in the animal, and wished that some Newcastle gentlemen would pursue that part of the subject. After referring with pleasure to the local specimens in the Museum, and to the extraordinary success of one person who had obtained microscopical sections of fungi, he congratulated the people of Newcastle and other towns upon being favourably situated in the midst of a fine coal field, and noticed how wonderful it was that where these advantages were possessed rivers had been made to penetrate the country (like the Tyne, the Bristol Channel, the Tees, the Wear, the Clyde, &c.), as though it was intended that commerce in the article abounding should be facilitated.

The third lecture was on "What we Owe to our Coal Measures." The lecturer opened his discourse with a reference to the bituminisation of wood, peat, lignite, coal, anthracite, and graphite, as containing certain quantities of carbon, hydrogen, oxygen, nitrogen, and ash, and then proceeded to remark upon the products generally, ranking coal as of different characters, such as coking, cubic, splint, and cannel, stating that in 1840 the quantity obtained was 34,000,000 tons; in 1857, 65,394,707 tons; and in 1865, 98,150,587 tons. The coal raised in 1857 was as follows:—Durham and Northumberland, 15,826,525 tons; Cumberland, 942,048 tons; Yorkshire, 8,875,440 tons; Derbyshire and Nottinghamshire, 3,687,442 tons; Warwickshire, 398,000 tons; Leicestershire, 698,750 tons; Staffordshire and Worcestershire, 7,164,625 tons; Lancashire, 8,565,500 tons; Cheshire, 750,500 tons; Shropshire, 750,000 tons; Gloucester, Somerset, and Devonshire, 1,225,000 tons; North Wales, 1,046,050 tons; South Wales, 7,132,304 tons; Scotland, 8,211,743 tons; Ireland, 120,630 tons. In 1865 there were raised in Durham and Northumberland, 25,032,694 tons; Cumberland, 1,431,637 tons Yorkshire, 10,846,000 tons; Derbyshire and Nottinghamshire, 4,200,350 tons; Warwickshire, 859,000 tons; Leicestershire, 965,500 tons; Staffordshire and Worcestershire, 12,200,000 tons; Lancashire, 11,962,000 tons; Cheshire, 850,000 tons; Shropshire, 1,135,000 tons; Gloucester, Somerset, and Devon, 1,875,000 tons; North Wales, 1,983,000 tons; South Wales and Monmouth, 12,036,587 tons; Scotland, 12,650,000 tons; Ireland, 123,500 tons. The amount of pig-iron raised in 1857 was, in Northumberland, 63,250 tons; Durham, 284,000 tons; Yorkshire, 296,838 tons; Derbyshire, 112,160 tons; Lancashire and Cumberland, 31,748 tons; Shropshire, 117,141 tons; Staffordshire, 657,295 tons; Gloucester, 23,882 tons; Northampton, 11,300 tons; North Wales, 37,049 tons; South Wales (anthracite), 63,440 tons; ditto (bituminous), 907,287 tons; Scotland, 911,000 tons. Mr. Page expressed his opinion that it was desirable to economise the use of coal, as in course of time the supply must come to an end. Having remarked upon the peculiar qualities of coal, of ironstone, limestone, fire-clay, and shales, he dilated upon the utility of scientific researches and the discovery of oils in shales, and the application of fire-clays to sewage purposes. The lecture was interesting and instructive, and was well illustrated.

SAFETY-VALVE FOR STEAM-BOILERS.—Mr. HENRY ANDERSON, of Chicago, proposes a safety-valve which is held in position by a volute or other spring placed in the interior of the boiler, the said valve being provided with a stem, which extends through a socket in a bridge on the inner surface of the dome cover in such a manner that the valve operates free and easy, and the spring which holds the same in position is out of reach of the engineer or person in attendance, and cannot be tampered with.

SPRINGS FOR RAILWAY ENGINES.—The invention of Mr. S. MOULTON, of Bradford, Wilts, consists in embedding in the cross section of a hollow or solid cylinder of India-rubber rings or washers of metal or other suitable hard material. These rings give greater firmness to the India-rubber cylinder when employed as a spring. He perforates the rings so that the India-rubber may be connected through the openings. The whole mass is cured in the ordinary way.

LIMITED LIABILITY.—The decision of the Master of the Rolls, in re the National Savings Bank Association (Limited), has been affirmed, on appeal, to the effect that a holder of fully paid-up shares in a limited company is a contributory within the meaning of the Companies Act, 1862, and, as such, had a right to petition to have the company wound-up. Lord Justice Turner said the Court had nothing to do with the policy of the Legislature in constituting these limited companies, though probably if it had foreseen what would be the effect of it so doing it would never have passed the Act at all, or not without some provision for the protection of the poor people who were drawn into these companies by designing persons, who had regard only to their own interests.

HOLLOWAY'S PILLS—THE CHIEFEST WONDER OF MODERN TIMES.—This incomparable medicine increases the appetite, strengthens the stomach, cleanses the liver, corrects biliousness, prevents flatulency, purifies the system, invigorates the nerves, and reinstates sound health. The enormous demand for these pills throughout the globe astonishes everybody, and a single trial convinces the most sceptical that no medicine equals Holloway's pills in its ability to remove all complaints incidental to the human race. They are a blessing to the afflicted, and a boon to all who labour under internal or external disease. The purification of the blood, removal of restraint from the secretive organs, and gentle aperitive action, are the prolific sources of the extensive curative range of Holloway's pills.

FOREIGN MINES.

CHONTALES GOLD AND SILVER.—J. White, Oct. 3: Consuelo Mine: Since my last report we have succeeded in intersecting the lode in the Consuelo cross-cut; it is 3 feet wide, containing hard quartz, small veins of clay and prian, but unproductive for gold; the stratum is decomposed porphyry, impregnated with red oxide of iron, bearing in its general characteristics every similitude to that which invariably accompanies the rich portions of the lode. A level is being advanced east with all practicable dispatch, in order to reach in the least possible time the dip of the very superior quality auriferous vein that exists in that direction in the upper workings. The suspension of No. 2 shaft continues, consequent on the circumstances fully explained in my last report. In No. 1 shaft the lode exhibits the same appearance as for some time past; operations for the greater part of the month have been suspended, through the extreme necessity of applying all the available forces to clearing and securing the runs of ground that occurred during the past month in No. 2 level, and, notwithstanding the very many difficulties to contend against, good progress has been effected, and I consider the distance now to complete is about 8 fathoms. —Estrella Mine: In the level extending west from the base of the hill the lode is without alteration. The prosecution of operations east, in the old workings on the lode, being attended with so many difficulties, it was considered advisable to open up a level at a little distance south, and extend it with a greater inclination north than the bearing of the main lode, in order to reach it at an undisturbed point, which, in all probability, stands in close proximity.—San Antonia Mine; In No. 1 level, advancing west, the lode is 14 in. wide, producing 1 oz. of gold per ton of ore; the development of the various parts of the lode throughout the month for the purpose of effecting communications between the different levels has been very successful; the lode averaging in width 2 ft. 4 in., and worth 1¾ oz. of gold per ton of ore. We continue the timbering and securing the interior of the mines.—Surface: We have commenced the dispatch of stuff over the new incline double tramway in Consuelo Hill, and I am pleased to say it works admirably well, and is capable of transporting at least 150 tons per day. The single line of tramway is now being laid from the shoot towards the Estrella mill, and is getting forward satisfactorily. The English and native carpenters are still busily engaged about preparing the necessary parts of the machinery, and which are in a very fair state of advancement. I send you herewith the tabular statements.

— W. C. Paul, Oct. 3: Consuelo: The lode intersected in the cross-cut is over 3 feet in width, and although at present not productive, has all the appearance of a rich lode, having the same character as the rich nail towards which we are driving a level, and I have no doubt but that in a little more driving we shall find the lode much improving. Very little has been done in Nos. 1 and 2 shafts, owing to the necessity of putting the men to secure the ground in level No. 2, where several runs occurred during the heavy rains. These have been well secured, and there may be 6 or 8 fathoms more to secure.—Estrella: We are still driving the level east, on the Estrella lode (the level being, however, a little north) to drive in undisturbed ground, on account of the insecure condition of the ground, &c., in the old workings.—San Antonio: The lode in this mine is much improved, at one or two points being worth over 5 ozs. to the ton, the whole of the various points at least averaging 2 ozs. to the ton. The lode is 2 ft. 6 in. wide.—San Domingo: The cross-cut here has been communicated with the shaft, and ventilation secured, and in a short time the shaft will be cut down, and well timbered, when we shall drive east on the course of the lode to get to the rich nail, which in the old mine was so productive. At the El Salto cross-cut, after 10 varas driving, the lode has been cut, but at the point intersected is of no great value.—Trinidad: The lode here has been driven on 8 varas, and is a large lode, producing 1 oz. per ton. The lode is not less than 6 feet in width. At San Antonio a tunnel is being driven rapidly at $8 per vara, to intersect the lode in depth, which will also intersect the Trinidad lode; when this is completed, and communication effected with the present workings, we shall be able to tram all the quartz direct from the mines to the mills now erecting at San Domingo, which will be then about ready for operations. The tramway will also be completed by or before that time. The San Domingo cross-cut will also be continued to cut the Trinidad and San Antonio lodes west, and a tramway be made to join the above-named mills, when all three mines can be rapidly and cheaply worked.—Surface: The incline plane at Consuelo is complete, and is working well. The surface operations are at Consuelo and Santo Domingo progressing fairly, the weather having been fine for the past three weeks.

LINARES.—In the 100, west of engine-shaft, the lode is large, and spotted with lead, but not so productive as it has been. The 75, east of Warne's shaft, being quite poor, the men are put to strip down the side near the shaft. In the 75 west the lode is large and strong, but has declined in value. In the 65, west of Crosby's shaft, the lode is small and irregular. In the 120, east of engine-shaft, the men are opening the south side of the level, where the lode is of an immense width, containing occasional large boulders of lead; the extent of the vugh, or fissure, is not yet known; there are eight men in it, the ventilation is too bad to admit more. The 95, east of Thorne's shaft, is looking very kindly. The cross-cut south, in the 75, is hard for driving. San Jose shaft is completed, and the men put to drive west on the course of the lode, which is worth 1½ ton per fathom. The lode in Cabrera's winze has failed. No. 147 winze has fallen off in value since the sinking has been resumed. Marin's winze is over the 120, and we are driving east from the bottom, expecting to knock through to the vugh alluded to, and effect a good ventilation to the 120 fm. level. —General Remarks: In the tribute department we have increased the number of men; the stopes, on the whole, are looking much as usual. The new engine, on Taylor's shaft, will be started this month, and if the new pitwork arrives shortly the old will be changed at Crosby's shaft, and the water forked this month. We estimate the raisings for November at 275 tons.

FORTUNA.—Nov. 3: Canada Incosa: In the 100, west of O'Shea's shaft, the lode is small, and the ground hard for driving. The 90, west of Henty's shaft, is not so productive as we expected to find it at this point. We have long been expecting an improvement in the 80, west of same shaft, but the lode is still small. In the 70, west of Kennedy's shaft, the lode is small, and ground hard. The 70, east of Carro's shaft, is in all probability a good run of ore ground; the lode is worth 1 ton per fathom. The 55, east of same shaft, although not so productive as it was, is still opening good tribute ground, worth 1¾ ton per fathom. The lode in the 45 east is very small. We are going to open the side of the level, where most likely the main part of the lode will be found. Judd's shaft is hard for sinking. Manuel's winze is holed to the 80 fm. level; the lode is small and poor. The ground in Manhon's winze is hard. Utrera's winze is going down in a promising lode, worth 1 ton per fathom.—South Lode: The lode in the 40, east of San Pedro shaft, is large and strong, yielding good stones of lead, worth 1 ton per fathom. The 40 west contains stones of lead, but not enough to value. The lode in the 30 west is chiefly composed of quartz, calcareous spar, lime, and lead ore, for the latter worth ¾ ton per fathom. The lode in Caledonia's winze is large and strong, and of a promising appearance.—Los Salidos Mine: The 100, west of engine-shaft, is at present moderately productive. The 90 west has passed through a strong cross-course, and is now in hard ground. We have reached the point of the lode in the 75, west of Buenos Amigos shaft, where it is looking very kindly, worth 2 tons per fathom. The lode in the 65, west of San Carlos shaft, is compact and firm, and worth 1½ ton per fathom. The 55 west is poor. The 45 west is easy for driving, and the lode of a kindly appearance. There are good stones of lead in the upper part of the 100, east of engine-shaft, but the bottom is worthless. The 90, east of San Pablo's shaft, is opening out good ground, worth 1¾ ton per fathom. The 75, east of Cologan's shaft, has passed through a cross-course, and is improving satisfactorily. The lode in the 65 east is of a promising appearance, worth 1¾ ton per fathom. Mariano's winze has been holed by a cross-cut. Guillermo's winze is nearly deep enough for the 100 fm. level. Gerona's winze will reach the 75 fm. level in the present month; the lode is worth 2 tons per fathom. The lode in Galvez' winze is small and firm, and the ground hard. In Francisco's winze the lode is divided into two compact and good branches, worth 2 tons per fathom. We have commenced sinking Cologan's shaft, and shall get it down as fast as possible. The tribute department is without any alteration. The surface work is going on regularly, and the machinery is in good working order. We estimate the raisings for the month of November at 400 tons.

ALAMILLOS.—Nov. 3: In the 4th level, west of San Rafael shaft, the lode is small and unproductive. Good progress is being made in the 4th level cross-cut south, and we expect to reach the lode next month. The 2d level, east of La Magdalena shaft, has slightly improved, worth 1 ton per fathom. The 3d level, west of Domingo's winze, is opening fine tribute ground, worth 2½ tons per fathom. We have commenced the extension of the 3d level, east of Domingo's winze; lode worth 2½ tons per fathom. The 3d level, east of La Magdalena shaft, is opening a splendid piece of ground, worth 3½ tons per fm. The 3d level, west of the same shaft, has declined in value, and is now worth 1 ton per fathom. In the 3d level, east of Taylor's, the lode is very small, and the ground hard for driving. The lode in the 4th level east is large and strong, and spotted with lead. In the 4th level west the lode has a kindly appearance, and yields good stones of lead. The lode in the 3d level, west of San Adriano shaft, is opening good tribute ground, worth 1½ ton per fathom. We have commenced driving the 4th level, east of Crosby's, worth 1 ton per fathom. The lode in the 2d level west when intersected by the cross-cut was worth 2 tons per fathom, but it soon failed. We have resumed driving the 2d level, west of Crosby's shaft; lode small at present. In San Enrique shaft the men are getting on well. San Adriano shaft is getting hard. The lode in San Francisco shaft is diminishing both in size and value. The tribute department is looking much as usual. The working of the western engine (Crosby's) is resumed, and the stopes that were stopped three months ago will be set on in a day or two. The machinery is in excellent working order. We estimate the raisings for November at 150 tons.

CENTRAL AMERICAN.—Alotepeque, Oct. 1: San Pantaleon Mine: Good progress has been made in driving the San Alfonso deep adit level during September. The lode is in two parts, together 1½ ft. wide, and composed of flookan, quartz, and iron pyrites, with occasional stones of ore, but not in sufficient quantities to value. The lode in Guadalupe, or 10 fathom level, below San Alfonso, is 2 ft. wide, composed of hard quartz and carbonate of lime, and producing stones of good argentiferous blende and galena, worth 6 cwts. per fm. The lode in the stopes east and west of Treguero's winze continues worth about 15 cwts. of ore per fm., of low quality. These stopes are now communicated between San Alfonso and Guadalupe level, at Treguero's winze. The lode in the stope west of Lemus's winze is very poor. In the stopes above Guadalupe level, west of Quejada's winze, the lode is large, worth 15 cwts. of ore per fathom. In searching the back of Dolore's adit, west of Cornubia engine-shaft, we have taken out about 1 ton of ore of low quality. In San Carlos Mine the operations are being carried on with all possible energy, and our prospects have improved a little during the last week or two. There is a good bunch of ore in the stopes above La Esperanza level, and the lode in the stopes west of Mistun's rise is also yielding some good ore—at both points worth 23 cwts. per fm. The lode in the stopes above San Rafael adit level is worth about 1 ton per fm. The western part of these stopes, having become poor, are suspended. The rise above this level is going up to prove a large piece of ground, and the lode in it is 1 ft. wide, composed of porphyry, with a little gossan, at present without any ore. Below San Rafael level the stopes east of Buzza's winze are no longer productive, and are suspended. The north lode, driving on in the adit level, east of the cross-cut, is 3 ft. wide, composed of quartz, mundic, flookan, calc-spar, and small pockets of argentiferous blende, but not enough to value. Cerna's deep adit cross-cut has not been marked by so good a progress, owing to some harder porphyry having been encountered; hopes, however, are entertained of a change for the better. The average ley of the ores for September is expected to be higher than for August, and the estimated raising for October (four weeks) is as follows:—San Pantaleon, 12 tons; San Carlos, 26 tons: together, 38 tons, which, assuming the average at 60 ozs. per ton, will produce 2280 ozs. of silver.—San Juan Mine: This working is about 250 fms. north-west of the Atutilca Mine between that and San Pantaleon. We have cleared out an old adit for 5 varas, and have driven east on the lode for 10 varas; the lode is from 1 to 2 feet wide, composed generally of soft porphyry, quartz, and gossan, and has at intervals produced good stones of silver ore, and on one occasion good specimens of native silver. The lode will be hereafter known as Aguacate lode—the level San Andres adit. Several assays of gossan have been made (picked samples), which have produced respectively 42½, 31, 633, 81, 307, 71, and 120 ozs. These results are encouraging, and are considered to warrant the opening on this lode. The 32d conducta has returned safely from Guatemala, having delivered at the Mint 2 bars, of the value of $8631·3¼. At the last moment, from a failure in the cupel, two bars were not completed, and stand over for the next conducta.

PESTARENA.—Nov. 8: You will hear with pleasure that our gold remittance, due the first day of next month, will much exceed the last. Although our last remittance has been made so recently, we have already produced enough amalgam to yield about 400 ozs. of fine gold, and everything continues to look most prosperous. In the Aquavite Mine all the stopes continue as productive as last reported. In the Peschiera Mine the following is our valuation of the most important points:—The lode in sinking in the bottom of the engine-shaft, under the 175 metre level, varies from 2 to 3 feet wide, yielding 8 tons of ore per fathom, worth 2 ozs. of gold per ton. The lode in the bottom stopes of this mine is fully 3 feet wide, producing 9 tons of ore per fathom; value about 2 ozs. of gold per ton. The cutting and mason-work for the water-course to the shaft, for the pumping turbine, is finished, so no time is lost in preparing for the discharge water from the same. The construction of a house for the winding turbine is also being carried on with all speed.

NEW WILDBERG.—James Sanders, Nov. 10: Carter's Shaft: The 90 east is a little easier for driving, with spots of copper ore in it, but not to value. The rise above the level remains as last week. The 80, west of Davey's stopes, remains as last week, worth 15 cwts. of lead ore per lachter. The stopes above the level are worth 1½ ton per lachter. The steelstone cross-cut, and the drivage west on the Erbteilfstergang are without noticeable change. No lode has yet been met with in the cross-cut south in the 70 east. The 50 drivage, on the Johannes' Trum, is yielding a little ore, and looks encouraging.—Michael's Shaft: The 70 west is at present unproductive; the character of the lode is the same as that in the western part of the mine. We have 60 lachters to drive to communicate with the 70, east from Beck's workings; and, looking at the old workings above the adit, we fully expect to meet with some good deposits of ore in this piece of ground. The cross-cut north remains as last week, composed of steelstone, with lead and copper ore, but not of value.—Beck's Workings: The rise above the 70 is unproductive. We have now about 9 ft. more to communicate with the winze. We are drawing the water out of the winze, in order to sink to meet the rise. By this means we hope to communicate in a few days.

PONTGIBAUD.—Capt. Rickard, Nov. 2: Roure: The sinking of Richards's engine-shaft below the 100 has gone on pretty well since the 6th, when the water got in fork. The 100 metre level, south of this shaft, is in soft unproductive ground. The same level north is also in poor ground. The 80 north, on Emily's lode, yields ¾ ton of ore per fathom. The same level south is poor. The 60 metre level south is yielding 1½ ton of ore per fathom. Our stopes throughout this mine yield about the usual quantity of average quality stuff. The tribute pitches yield pretty well.—La Grange: The sinking of Nosky's shaft below the 60 goes on slowly; the lode yields 1½ ton of ore per fathom. The 60 metre level north yields stones of ore; the lode where being undercut behind the end yields 3 tons of ore per fathom. The 20 in the same direction is unproductive. The 20 metre level south looks kindly; the lode in the end yields stones of barytes and mundic. Our stopes and tribute pitches yield a good supply of stuff for the laveries. The 40 metre level south yields 2 tons of ore per fathom. The same level north of shaft is unproductive. The 20 metre level north is in soft ground and poor. The same level, south of shaft, yields 1½ ton of ore per fathom. The same level, north of junction, on eastern split of the lode, yields 3 tons of ore per fathom. The adit north is in a very kindly lode, which promises shortly to become productive. Our tribute pitches continue to yield very well.—Pranal: We are now forking below the 50, and hope in about a fortnight to see the 70. The cross-cut in the 8 south is without change. The 8 metre level north yields 2½ tons of ore per fathom. Our tribute pitches are all again at work, and yielding their usual quantity of ore. At surface we are continuing to repair the effects of the floods, which is so far done as to carry on our dressing without interruption. Our samplings are 312 tons.

VAL-SASSAM.—Thos. Rickard: As we have already arranged with you, the works at Tospino Mine are now closed for the winter months, everything being prepared there for stoping the ore ground on a large scale as soon as the winter breaks up. Unfortunately the frosts, which have already set in, have stopped our supply of water for dressing. What we have already dressed, about 12 tons, we have sold to the Stolberg Smelting Company, and are sending it away to them. At Ursera the works will be continued on about the same scale as at present throughout the winter. There is no change worthy of mention in the mine since the last report. Here the elevation being much less than at Tospino the frosts are less severe, and we hope to be able to go on dressing for some time longer, if not all through the winter. We have this week sent off about 6 tons of argentiferous copper ore.

HINTS TO EMIGRANTS—No. VI.

BY CHARLES S. RICHARDSON.

Although, as I said in the last chapter, riches seldom fall to the lot of the working people, yet it is not always withheld from them. For example—George Kester and Absomem George bought some of these forest lands in Ritchie county, for which they paid 16s. 6d. per acre, and on which they have procured a livelihood, with occasionally "working out," for the past eight or ten years. Three years ago oil was found on some of the adjacent farms, and all the district rose immediately into value. A few months ago I wanted these lands for well-boring purposes, having discovered they held out excellent prospects for oil. Now, their agricultural value was not more than 2l. 10s. per acre. I found the owners had granted some oil leases four years before, but which were forfeited for the non-fulfilment of conditions. Nevertheless, they were an impediment to a clear title. At last I made a compromise with both parties, and bought up the two farms for 55l. per acre. Now, this was a good bit for two poor men, after making a living for years on what only cost them 16s. 6d. J. Rutherford owns 500 acres in one of the adjoining creeks. With the farm improvements it is considered worth 5l. per acre. We suppose it contains oil, although none has yet been struck. He has repeatedly been offered 120l. per acre for a large portion of this farm, but will not sell. Jacob Howel bought 113 acres of the very roughest of these forest lands on White Oak Fork, in Wood county, paying 1l. 5s. per acre. He granted an oil lease some time ago to a party of Parkersburg gentlemen at one-fifth royalty, and wells were commenced. Soon after, the now celebrated No. 1, Longmoor, or White Oak Well * was struck, which has been steadily producing 40 barrels of heavy or lubricating oil, of the purest quality, per day ever since, worth 8l. per barrel, making 320l. per day, nearly all profit, netting to the poor man an income from his royalty of 64l. a day. How long this may continue no one, of course, can tell, for oil-wells are very uncertain property, and are very capricious at the best of times. This one has now been steadily pumping, without much diminution, for over nine months, although there are two or three others close adjoining that yield a much larger quantity. The lessor informs me that he has been offered 20,000l. for his farm, but is reluctant to part with it, large as the sum appears to be. I can enumerate numerous other similar instances, but this may suffice to show that a poor hard-working man may sometimes become rich, in an unexpected manner, even from his own property. Many of these lands along the line of the oil belt find ready purchasers at from 300l. to 1200l. per acre, and are considered cheap speculations at such prices. One good well ensures a large fortune, especially here, where the oil is of such great value, it being considered very nearly equal, as a lubricator, to the ordinary sperm oil of commerce. Now, along certain parts of the counties I have heretofore named, there are lands which today would be thought dear at 2l. 10s. per acre, yet in two years hence, in all probability, they will be eagerly sought for at 250l. Standingstone Creek, in West county, Laurel Fork, in Roane, and Steer Creek, in Gilmer, are spots I have examined, which promise to become oil-producing. Some few wells have been commenced, but, up to the time of my writing, without any positive success, although any day a fine strike may be made. These, however, are all chances, and the hope of getting a fortune by such means must not, under any circumstances, be entertained by the emigrant. It is my advice to all who enquire of me about this country that if they have a dislike to hard work and rough fare, or should possess a weak or sickly constitution, not by any means to come out here, for they most assuredly will meet with nothing but disappointment, trouble, and poverty. It may be asked why do I advocate West Virginia for persons to settle down in in preference to other States, especially when it is well known the western lands may be obtained nearly as cheap, and only require about one-half the labour to work them? Well, I do not do so, only for a certain class of men—those whose entire captital consists in their personal labour. To farmers who have got a little money, and are not over 35 years of age, I advise to go to Illinois, Missouri, or Kansas; rich lands, far better than any in Virginia or Maryland, may be obtained there for 2l. per acre, but it is a long way off, the cost heavy to get there, the climate in many places very sickly to Europeans, fevers and agues constantly prevail, and in many of the flat lands, near the rivers, and even in some of the prairies, when the ground is fresh broken up, miasmic vapours arise that spread contagion of a dreadful kind among the new comers. I have been witness of some most frightful cases of typhoid and other fevers. Now, if a poor man is laid up with one of these intermitting chills and fevers he cannot work, but a man of means can afford to hire labour on his farm; therefore, a few months' sickness does not materially affect his yearly income, but with a working man the case is very different; when he ceases to work his daily bread is stopped too; therefore, I argue the chances are against the poor man. Now, West Virginia is one of the healthiest climates in the world, and exactly suitable to Englishmen. Mark me, I speak from experience. My family, eight in number, lived in one of the back settlements—the Bridport Mines, Kanawha—for six years, and during all that time we never had occasion to send to the town (Charleston) even once for a doctor, while the five years we resided up in the Eastern States (and they are generally pretty healthy) the medical man was in almost constant requisition. Apart from rheumatism, which arises from the natural humidity of the atmosphere, something like Cornwall, and diarrhœa complaints, very little other sickness prevails, and as the country is perfectly drained there are no stagnant waters or swamps; consequently, agues and fevers are of rare occurence. Again, there is such a variety of employment, and generally a scarcity of workmen; and if wages are lower in the country places than in the towns, the cost of living is much less, and a man who has got a small farm need not go far from home to find work. All these are advantages which materially aid the new settlers; therefore, I say, with such prospects in view, West Virginia is at the present time more preferable to one class of emigrants than most others.—*Pine-street, New York.*

* See illustrated pamphlet (by the writer) on this valuable discovery. Also another, showing "The Cause of the Oil Deposits."

ROPES.—In the manufacture of ropes, Mr. R. PETTY, of Sunderland, proposes to employ a composition, consisting of resin, 28 lbs.; tallow, 3 cwts.; soda, 1 cwt.; soap, 1½ cwt.; and clear lime water, 112 gallons; instead of soap or tallow, to rub the strands with. The materials are boiled together, and a compostion of the proper consistency obtained.

Mining Correspondence.

BRITISH MINES.

BEDOL-AUR.—H. R. Harvey, Nov. 14: The shaftmen are still engaged clearing the shaft from the 77. Jones's tribute pitch is producing 15 cwts. of lead per fathom. The other pitches are without alteration.

BEDFORD UNITED.—Jas. Phillips, Nov. 14: We are still sinking under the lode in the north shaft, and driving by the side of the lode in the different levels throughout the mine. The stopes continue to yield the same quantity of ore as for some time past.

BOTTLE HILL.—J. Eddy, Nov. 15: We have now nine employed in working on the south or copper lode, in the 12 fm. level; four men driving east and four west, and one man to take away the stuff coming from the ends. In driving east we find the lode about 15 in. wide, and producing rich work both for tin and copper; lode now equally as good as when reported on last week. As we still find the copper to be lengthening in driving east, and apparently to be making larger and richer in the bottom of the level, we intend in a few days to put a pare of men to drive the 24 west to get under the shoot of ore gone down in the 12; a short distance driving will prove this. Should the lode continue to be as productive in the 24 as it is now in the 12, good returns may soon be expected from this lode. The lode in the 12 west is now about 2 ft. wide, but for the present disordered. We are now near a cross-course, and no doubt this has caused for the present the change, but still the lode is producing rich stones of copper ore.—Main Lode: The lode in the different stopes is turning out about the same as it has for some time past. I shall go to Truro to see the weight of our parcel of tin to-day.

BRYN GWIOG.—F. Harper, Nov. 14: Since my last to you we have completed the alterations in our pitwork, and at present consider ourselves quite safe and prepared for the winter floods. At the 102, east of engine-shaft, we are carrying the whole size of the end in the lode 4½ or 5 ft. wide, and no south wall; it is producing good saving work for lead—a very promising looking lode. The lode in the 90 east is small, and intermixed with white shale, at times showing a little lead, but not to value. The lode in the winze in bottom of the same level is about 2 ft. wide, producing saving work; the lode in the same level, west of engine-shaft, is just as for some time past—worth 2½ tons per fm.; we have had a pare of men stoping in the back of this level for some few days past, in order to prove if the lead continues to hold up good, and are pleased to say it is as good as when we commenced stoping; the place being very much confined for so many men, I have suspended the stoping and continued with the driving of the end. The lode in the 75, west of engine-shaft, is 1½ ft. wide, with a branch of lead about 4 or 5 in. wide, and of a softish nature, easy for progress, and very nice looking ground; we are opening out good tribute ground in this part of the mine. The lode in the winze in the bottom of this level, going down on the run of ore at the 90, is improving, and I hope shortly we shall have a good lode at this point. The pitch in the bottom of this level is worth 2½ tons per fm. The pitch in back of the 75 east, on the new lode, is worth 2½ tons per fm. We are making good progress with the sinking of Bramwell's shaft below the 80.

BRYN GWYN.—H. Nottingham, Nov. 13: In driving the level south-west from middle incline, east of shaft, we have met with a hard bar of ground crossing the course of the level, which has impeded our progress in driving this week. By following the soft ground in this level we have driven across a great part of the ore-bearing ground, but we shall be obliged to sink in this level before we shall have made a fair trial of this ground. In order to get out of this hard piece of ground I have put the men to drive a branch off to the east about 2 fms. from the end, which I think will enable us to pass this hard place quicker and cheaper. There is no change worthy of note in the lower level, driving south from incline. The workings west of Clark's level are poor for lead. The stopes in the south end of Field's level, and the tribute bargains in the north end of Field's level, continues as last reported. The tributors are not getting so much ore in the old levels, south-west from shaft. I consider these levels have now had a fair trial.

BRYNANTLLECH.—W. Wasley, Nov. 15: Fair progress is being made in sinkingLewis's shaft; I have to-day put three more men with them, to make nine, three each stem; the dresser, and two from the deep adit. I shall put the handpump to work next week, so that the sinking may be carried on as fast as possible. The ground in the deep adit is a little harder this week than last—re-set the month, at 4l. 5s. per fm. The lode and ground in the end driving on the new lode still looks very kindly, and is letting out a deal of water.

CARDIGANSHIRE LEAD.—E. Pearse, J. Pearse, Nov. 15: Pant Mawr Mine: The lode in the 20, west of the engine-shaft, is worth ½ ton of lead ore per fm. The stopes in the back of this level are worth ½ ton of lead ore per fm. The stopes in back of the 10, east of engine-shaft, are worth 12 cwts. of lead ore per fathom. We have several tons of lead dressed towards our next sampling.—Glan Rheidol Mine: The engine-shaft is down 6 fms. below the 30; the ground is favourable for sinking. We have cut further into the north side of the 30 fm. level, west of engine-shaft; the lode is producing good saving work, and looks promising for further improvement. The ground in the 20 cross-cut, south of shaft, is spare for driving. The stope in bottom of the 20, west of shaft, will produce 25 cwts. of lead ore, and ½ ton of blende per fm. The pitch in the back of the adit level is yielding a fair quantity of ore, and the men are earning good wages. We are making good progress in our dressing department, and hope to have 30 tons of lead ready for market by the end of this month.

CASTELL CARN DOCHAN (Gold).—J. Parry, Nov. 14: The yield of gold from last month's 200 tons of quartz was 56½ ounces. We have stamped 53 tons of lode-stuff this month. The lode in No. 3 stope is about 4½ feet wide, very hard, with patches of pyrites. The lode in the Smithey stope, after being very narrow for a long distance, begins to open out again. We are sinking from the floor of No. 3 stope to meet the drivage from the Smithey stope. We must stop the stamps to-morrow to repair, and put a key in one of the water-wheel bosses.

CENTRAL MINERA.—Thos. Hughes, Nov. 15: Victoria Engine-shaft: The ground in the 40 yard level west is easy for progress, and very promising for an early improvement. The stopes in the 50 yard level yield good stones of lead.

CORNISH CLAY.—W. H. Willcock, Nov. 13: The works are pushing on as fast as possible, and I expected before this to have been into the bed of clay, but have come upon a run of ground as hard as adamant; as soon as we have driven through this we shall be safely landed into as fine a bleaching clay as can be found in Cornwall. Soon after we shall be able to send off the clay as fast as it can be made marketable, as our agent has been waiting for months for supplies. We hope uninterrupted success will follow.

CRELAKE.—W. Skewis, W. Hooper, Nov. 15: We have thought it advisable to suspend the driving of the 86 cross-cut, and also the 74 east for the time, and to put the men to sink a winze in the bottom of the 74 east, to ascertain if the lode is heaved northward between those levels (the 74 and the 86), and if so, to what extent. The lode in the winze sinking in the bottom of the 74 is 3 ft. wide, composed of mundic spar, and copper ore, worth 10l. per fm. The stope in the back of this level is worth 7l. per fm. The cross-cut north from the 50 west is driven about 2½ fms. through ground intermixed with spar, mundic, and branches of copper ore, which indicates the prospect of a good lode when intersected. The lode in the 40 west is 2½ ft. wide, composed of mundic, spar, and copper, altogether a fine, strong-looking lode, and yielding saving work; we are expecting a good improvement in this end shortly. The lode in the rise in the back of this level is yielding saving work, and presenting a kindly appearance. The lode in the winze sinking in the bottom of this level is worth 12l. per fm. The cross-cut south from engine-shaft is driving with all speed through good ground towards the south lode. No other change to notice.

CRENVER AND WHEAL ABRAHAM UNITED.—Wm. Kitto, Nov. 15: The lode in the 70 east is from 3 to 4 ft. wide; I never saw a kindlier lode in my life, and should think we are near a good course of ore either before us or below; the lode is much softer for opening out ground. We have not yet taken down the lode in the 60. We are making good progress in driving the 80 cross-cut south, and, judging from the appearance of the ground we are driving through, expect to cut the lode this week; we have got small veins or branches, so I think we are near it; as soon as we reach it you will at once be advised.

CROWAN AND WENDRON.—R. Reynolds, Nov. 13: The cutting down of the adit shaft is being forced with all speed. The part carrying down is about 3 feet long, containing some good saving work for tin, and we shall use every effort to prepare a parcel for sale as quickly as possible.

CUDDRA.—F. Puckey, Nov. 14: There is no alteration in any of our underground operations during the past week, in consequence of our having broken the crank and sweep rod of our stamping and pumping-engine; this has filled the bottom of the mine with water, and prevented for the time nearly all our men from working. We expect to get the engine to work again by to-morrow evening, and hope soon to make good progress in forking the water.

DALE.—R. Niness, Nov. 12: There is not much improvement in the Pipe vein since my last report. Everything is being pushed on as fast as possible.

DARREN.—R. Williams, Nov. 15: The lode in the 25 west has considerably improved, showing good stones of lead ore; they are small as yet, but, as indicating our approach to a large course of ore, they are of very considerable importance.

DEVON AND CORNWALL UNITED.—T. Neill, Nov. 13: The lode in the 24, west of engine-shaft, is looking more promising.

EAGLEBROOK.—H. Tyack, Nov. 10: In the 30 east we have driven the cross-cut south about 11 ft. into the vein, but have not yet reached the south wall; the part of the lode driven through is composed of clay-slate, gossan, soft spar, stones of lead, white carbonate of lead, and strong spots of copper, but not sufficient in quantity to place a value on; the lode is letting out much water. In driving the 30, west of cross-cut, the lode at present is not producing so much lead as usual, being now intermixed with copper; the present value is about 18 cwts. of lead ore and about 8 cwts. of copper per fm.; the lode continues to be from 7 to 8 ft. wide.

EAST BOTTLE HILL.—J. Eddy, Nov. 15: We have commenced operations on our copper lode, and I am happy to say we have found the ground easier for working, lode making larger, and producing some rich stones of copper ore. We are pushing on with the erection of our wheel and stamps as fast as possible, and no time shall be lost in getting them in course to work.

EAST CARADON.—J. Truscott, Nov. 14: Caunter Lode: The 100 east is worth 8l. per fm.; the 100 west, saving work; the 90 east, poor; and the 90 west, poor.—New Lode: The 70 east is worth 5l. per fm.—South Lode: The 100 east is poor; the 90 east, 5l.; the 70 east, stones of ore; the 70 west, 8l.; and the 70 east, on south part, 18l. per fm.

EAST CHIVERTON.—Jas. Nancarrow, Nov. 14: Since my last the lode has greatly improved in the 35 east, now 18 in. wide, composed of soft spar, flookan, with spots of lead and copper ores; now driving by three men and three boys, at 2l. 12s. 6d. per fm. The boundary shaft is sunk 5½ fathoms below the level where we met with the lode, and opened east on its course, which produced a beautiful gossan and good stones of lead; we expect to meet with this lode in the shaft in about 2 fms. further sinking, when we hope it will prove something good. This shaft is now sinking by three men and three boys, at 1l. per fm.

EAST ROSEWARNE.—J. James, Nov. 15: In King's shaft the lode has further improved, now 1 ft. wide, worth 10l. per fathom. In the 85, west of shaft, the lode is 18 in. wide, producing stones of ore. There seems to be a good lode in the bottom, but it does not make up in the end. The rise in the back of this level is holed to the 75. We have now good ventilation, and shall stope from the ends of the rise on a lode worth 6l. per fathom. The 75 west is poor, and suspended. In the 43, driving east of Gallett's shaft, the lode is 6 in. wide, producing good stones of tin. The 43 fm. level cross-cut, south of King's shaft, is cleared out, and we shall resume the driving east on the engine lode at once. The stopes in the back of the 85 end are much as last reported, worth 9l. per fm. The stopes in the back of the 75, east of King's shaft, are worth 7l. per fathom.

EAST SNAEFELL.—Wm. H. Rowe, Nov. 13: In arranging the monthly bargains yesterday with the men, I thought it prudent to suspend for the present the sinking of the shaft, and have increased the force of men at the new adit and 9 north, which two points it is very desirable to communicate as quickly as possible; at the former the appearances are very cheering, and I have good hopes of finding something at the junction of the branch we are driving upon with the Glencherry vein. I have also contracted with Mr. T. Cain, millwright, Douglas, for the immediate erection of a substantial 30-ft. water-wheel, including pedestals, headstocks, sleepers, bolts, &c., complete, in good order, for the sum of 150l., delivered on the mine.

EAST ST. JUST UNITED.—J. Carthew, Peter Casley, Nov. 14: In extending the 20 south on the Guide, from Phillips's engine-shaft, we have cut one of the east and west lodes; we have seen it upwards of 2 ft. wide, with tin throughout, and has a very promising appearance. In the 10, which we are extending south, we expect to cut this lode early in the next month; we shall then commence the sinking a winze from the 10 to the 20. This is not only requisite for ventilation, in continuing our drivings south, but will give us facilities for opening up the new lode. In the 10, east from engine-shaft, on Davy's lode, where we reported last week the discovery of tin ground, we have set two additional tribute pitches, and the ground is looking very kindly. We are driving the 20 both east and west from the Cranjack shaft—tin in each end. The stopes east of North Bosorne shaft, below the 20, are working very well. At Wheal Widden the tributers are working very satisfactorily.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Nov. 14: The lode in the 95, west from engine-shaft, is 18 in. wide, composed of quartz, flookan, and prian, producing good stones of ore, with some crystallised; the ore is of much the same kind as that in the bottom of the winze, and the end is letting out more water, therefore we are anticipating a change for the better. The lode in the 85 west is 20 in. wide, of quartz, &c., producing stones of ore, but not to value; this lode does not underlie so fast as it did, which we look upon as a favourable sign. The lode in the winze sinking below the 85 west is 2½ ft. wide, producing 4 tons of ore per fm., with some good work for tin; this is certainly a very kindly lode, and from its appearance one would expect it to improve. The lode in the stope above this level is worth 2 tons of ore per fm., with some very good work for tin. The lode in the 75 east is small, but the ground has changed for the better, and which is letting out a quantity of water.

EAST WHEAL LOVELL.—R. Quentrall, Nov. 14: The turnpike lode continues to open out very well. We have not cut the lode in the cross-cut south, which is hard and spare for driving. I will give a detailed report at the meeting next week. The othe parts of the mine are just as for some time past.

EAST WHEAL RUSSELL.—Jas. Richards, Nov. 14: In Homersham's shaft, sinking below the 140, the ground being at present hard, progress is consequently slow.—Homer ham's Shaft: In the 140 east, and east of Roberts's cross-cut, the lode is 5 ft. wide, composed of capel, mundic, quartz, prian, and some rich ore, and is altogether healthy. In the stope in back of the 130, east of Barkell's rise, the lode is worth 8l. per fm. The lode in the stope in back of the 130, west of Barkell's winze, is worth 4l. per fm. In the rise in back of the 130 east the lode is large, 5 ft. wide, and yields saving work for copper ore. Shoding is progressing in the north part of the sett, and some good shode stones are being met with.

— J. Goldsworthy, Nov. 15: In Homersham's shaft, sinking below the 140, the ground is at present hard, and progress slow. In the 140, east of Roberts's cross-cut, the lode is full 5 ft. wide, composed of capel, quartz, mundic, prian, and some rich copper ore—altogether a fine looking lode. In the stope in back of the 130, east of Barkell's rise, the lode is worth 8l. per fm. The stope in back of the 130, west of Barkell's winze, is worth 4l. per fm. In the rise in back of the 130, east of Barkell's winze, the lode is 5 ft. wide, producing saving work. In the costeaning no lode has yet been met with.

FRANK MILLS.—J. P. Nicholls, J. Cornish, F. Cornish, Nov. 14: The ground in the engine-shaft is still good, and the sinking progressing rapidly. The west lode, in the 130 north, has not been taken down since our last report. The 130 north, on the east lode, has improved, now yielding about 4 cwts. of lead ore per fathom, and looking very promising to assume its former productiveness. The stopes in the back of this level are without change. The same remark will apply to the 115 fm. level ends north, on east and west lodes, also the stopes in the back. The stopes in the back of the 100 are yielding ½ ton and ⅓ of a ton of lead ore per fathom. The stope in the back of the 72 north is yielding ½ ton of ore per fathom. We have no change in the tribute department, nor any other part of the mine. We sampled this day (Wednesday) 100 tons of silver lead ore —50 tons of No. 1 and 60 tons of No. 2 being the last for the current quarter.

FURSDON.—J. Collins, Nov. 15: Our setting for this month is as follows:—A rise in the back of the 31 west to four men, at 5l. 10s. per fathom. A cross-cut to drive south in the 21 east, by two men, at 5l. 10s. per fathom. A winze in the bottom of the 11 east, to four men, at 7l. per fathom. A cross-cut to drive south, in the 11 east, by four men, at 4l. 10s. per fathom. A stope in the back of the 11 east, to four men, at 3l. per fathom. The men throughout the mine have been clearing their last month's stuff, consequently there has not been so much done on the ground as there would have been; but the little done has shown an improvement in the 11 east, where we have cut through the cross-course. In the stope the lode is worth full 20l. per fathom, and likely to improve. Where we have cut into the south, in the 11 east, close to the end, the branch is worth full 9l. per fathom. The winze in the bottom of the 11 east is worth about 30l. per fathom. The cross-cut south, in the 21 east, is still hard and spare for driving, but yielding good stones of ore. It has every appearance of a capel of a lode. The rise in the 31 west is worth 9l. per cubic fathom.

FURZE HILL WOOD.—Wm. Doidge, Nov. 15: No. 1 North Lode: The lode in the 54 east is not looking so well as when last reported on; it is now about 18 in. wide, composed chiefly of capel and peach, with some good stones of tin occasionally, but no doubt will improve again. The stopes in the back of this level are much the same as last reported on, worth 7l. per fm. We shall have a parcel of tin ready for market about the latter end of next week. Our engine and stamps are working well, and water easy.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., Nov. 10: We calculate to complete the tip-plat and engine-shaft 8 ft. below the 60 by the end of the coming week, after which the shaft will be in regular course of sinking below that level. The ground in the 60 cross-cut is improving as we get near the lode, and our progress during the past week satisfactory. The ground in the 50 cross-cut is also improving, showing indications of getting through the lode, which is at this point already seen over 30 ft. wide. The lode in the stopes in the back of the 50 is worth 4 tons of good quality ore per fathom. The lode in Will's stope, in bottom of the 40, is worth 3 tons of ore per fm. The lode in Doidge stope, in the bottom of the same level, west from winze, is worth 2 tons of ore per fm. The winze sinking below the 36 is going down through the north capels of the lode, and our progress is satisfactory. The rise in the back of the 50, west from old sump, is going up on the north side of the lode, for the purpose of forming an early communication with the winze. The lode in the winze sinking below the 50 west is without change, being worth 8 tons of ore per fm.

GREAT CARADON.—F. C. Harpur, Nov. 13: We are pushing on with the driving of the cross-cut south of engine-shaft, at the 72, as fast as possible; the ground just now is rather hard, and the branch which we lately passed through is letting down a good stream of water. The ground in the end at present consists of capel, killas, &c., with small branches, composed of quartz, mundic, peach, and spots of copper ore. The engine is in good working order.

GREAT LAXEY.—R. Rowe, Nov. 13: The sinking of the main engine-shaft below the 210 has been without change since our last report, and will be completed to the 220 by the end of the present month, when, from all appearances, the new level will at once commence to open out fresh valuable ore ground. The lode in the 210, driving north of the Welsh shaft, continues wide and productive, especially for blende, worth, in the part now being driven on, 1 ton of lead and 6 tons of blende per fathom. The 190 fathom level end is also in a large lode, worth mainly for lead 80l. per fathom. The 180 fathom level end continues to improve, and from being almost wholly unproductive for a long time, is now worth for lead and blende 30l. per fathom. The 165 fathom level end and sump are without change. In the 155 we have commenced to cut through the lode, the part already proved being worth 30l. per fathom; and the stopes between this and the 165 have of late improved, now worth in places from 70l. to 80l. per fm.—Dumbell's: The south sump, sinking below the 110, is now down 8¼ fathoms, in a lode steadily increasing in value, with very easy water, and of not yet ascertained width, worth for lead and blende, in the part where we are sinking, at least 160l. per fathom. In the 110 the end is again improving, worth fully 50l. per fathom, and the lode shapes further to increase both in size and value. Some of the stopes in the roof of this level have also of late been turning out very well, especially the one nearest to the forehead north, worth 200l. per fm., and the southernmost one also worth 200l. per fathom. The 80, driving south, continues to be worth 120l. per fathom, and other places in this part of the mine are fully as satisfactory as when last reported. The south ground throughout is without change, beyond a little livelier appearance generally. We have again sampled 100 tons of lead within the fortnight, without overdrawing or unduly forcing any part of our underground operations, but solely in consequence of our now realising the natural results of holing Dumbell's mine with the 110 fm. level, and thus more fully opening out the rich deposits of ore in that section of our mines, all which I have foreseen, and repeatedly referred to in former reports. Our returns are, therefore, greatly exceeding any ever known before, and we have every appearance of continuing our samplings as now—every 14 days.

GREAT NORTH DOWNS.—W. Rich, C. Bawden, Nov. 14: The part of lode carried in the 70 end, west of Sleggan's shaft, is 3 ft. wide, composed of friable spar, peach, and copper ore, worth 8l. per fm. The lode in the bottom of Butler's shaft is going down nearly perpendicular, and shows a very promising appearance, with saving work for copper. We frequently meet with hard floors of ground in this shaft, which retard the sinking, but to-day we seem to have got into more favourable ground.

GREAT RETALLACK.—George R. Odgers, Nov. 8: The men are getting on pretty well with the cutting down of the engine-shaft, and on Tuesday next I intend to set the removal of the engine and house, and also the building of the same. We have opened about 9 ft. north in the Trebellan lode, and which I find to be from 20 in. to 2 ft. wide, composed of quartz, prian, &c., with good stones of lead; the ground in which the lode is embedded is highly favourable for the production of lead. I have no hesitation whatever in stating that in my opinion, when properly developed, it will be found to produce large quantities of lead.

— G. R. Odgers, Nov. 13: The men are getting on pretty well with the cutting down of the engine-shaft. The lode in the adit level north, on the Trebellan lode, is from 2 to 2½ feet wide, of quartz, gossan, and prian, with occasional stones of silver-lead—a most promising lode. We have not yet met with anything in the costeaning. We have to-day set the engine-house, &c., to build with other work, so that if the weather should prove favourable we shall not take long in getting the engine to work.

GREAT SOUTH CHIVERTON.—John George, Nov. 14: The shaftmen have finished cutting down the south side of Gifford's engine-shaft, to sink on the underlie, and have commenced sinking. The ground is favourable for progress. The lode in the east end is composed of quartz, flookan, mundic, &c., of a very promising character.

GREAT SOUTH TOLGUS.—J. Daw, Nov. 14: Friday last was setting-day In the 166, east of Lyle's shaft, the lode is 1½ ft. wide, producing 1 ton of ore per fathom; set to two men, at 5l. per fm. The 140, east of new shaft, is in the cross-course, which is letting out a great deal of water; set to six men and three boys, at 4l. 10s. per fm. In the 125, east of Noel's shaft, the lode is 1½ ft. wide, producing 2 tons of ore per fm.; set to three men and three boys, at 3l. 10s. per fathom. In Noel's shaft, sinking below the 125, the lode has been a little disordered in the last 6 ft., but it has again become more settled, and will now produce 3 tons of ore per fm.; set to six men and three boys, at 12l. per fm.

HALLENBEAGLE.—W. Bawden, Nov. 10: Pinniger's engine-shaft is without alteration since last reported. Stone's shaft is now completed to the 56, and have resumed the driving of the 56 east; the lode is 12 in. wide, worth 7l. per fathom. The 47, east of Stone's shaft, is under the influence of the slide. In the 61, east of sump-winze, the lode is 2 feet wide, worth 3l. per fm. At Reed's shaft, sinking below the 53, the lode is 3 feet wide, worth 20l. per fm. The 53, east of Reed's, is at present not to value. In the 53, west of said shaft, the lode is 15 in. wide, worth 3l. per fm. In the 53, east of No. 1 winze, west of Reed's, on the south part of the lode, the lode is 12 in. wide, worth 8l. per fm. In the winze in bottom of the 53 fathom level, west of Reed's, the lode is 12 in. wide, worth 3l. per fathom.

LADY BERTHA.—F. C. Harpur, J. Metherell, Nov. 15: Since our last report no particular change has taken place in any part of the mine. In the 30 east we are driving by the side of lode. The lode in the 41 east is 3 ft. wide, composed of quartz, mundic, iron, and ore—saving work.

LEVANT UNITED.—J. Carthew, Nov. 14: Since the committee were here we have commenced sinking a new engine-shaft, so as to take the lodes in the adit level, where an intersection will take place, when a splendid property will be opened up.

MINERA UNION.—W. T. Harris, Nov. 15: Douglas's Shaft: The ground has very much altered in character since last report; at present it consists of chert of a very congenial character, and containing a little lead; the water continues about the same. The ground in the cross-cut at the 40 is hard for progress. All the other bargains throughout the mine are making satisfactory progress, and without alteration to notice.

MOLLAND.—T. Bennetts, Nov. 14: The lode in the 72 east has undergone a change, inasmuch as it now presents almost a mass of gossan, associated with prian and stones of grey ore. We are carrying it 4½ feet wide, and no north wall. With such a large gossan lode, characterised by prian and stones of grey ore, one is almost led to conclude must be the precursor of a good lode of ore. In the winze sinking below this level the lode is 4 feet wide, composed principally of a hard compact quartz, with little or no iron associated with it, and in which we met with good stones of grey ore. It seems to me the lode at this point is undergoing a great and important change, and a fathom or two more sinking will, I expect, throw much light on it.

NEW BIRCH TOR AND VITIFER CONSOLS.—W. Skewis, R. Trevarthen, Nov. 14: Hambley's Shaft: The 48 fm. level east is worth 4l. per fm.; the rise in back of this level is worth 5l. per fathom. The 36 fm. level is yielding a little tin, not to value. The 24 fm. level, east of new whim-shaft, is worth 3l. per fm.

NEW CORNISH.—J. Richards, Nov. 15: Latchley Consols: In the 60 east the lode is being taken down; it is composed of more congenial capels than hitherto —mundic, quartz, and ore, worth ½ ton per fm., and is looking healthy. In the 50 east the lode is 18 in. wide, consisting of quartz, mundic, and ore, and is promising. In sinking and stoping west of Tregaskis's winze the lode is worth 2½ tons of ore per fm. There are two stopes working in back of the 40 east, in each of which the lode is worth 1½ ton of ore per fathom. In the midway level, driving west over Nankivell's rise, the lode is worth ½ ton of ore per fm.

NEW CROW HILL.—W. Trelease, Nov. 13: Saturday last being our setting-day, the following are the particulars:—The cross-cut at the 70, towards the lode, measured 1 fm. 5 ft., and is re-set to six men, at 7l. per fathom, stented to cut the lode, which I calculate is now only a few feet ahead. We have still good stones of lead coming from a branch in the cross-cut, which is dipping towards the lode. The winze below the 55 measured 13 fms. 3 ft., and is now down as deep as the 70, and I hope will be holed to that level in the course of another week. The lode in the bottom of the winze is still large and regular, 3½ feet wide, composed of flookan, mundic, jack, quartz, and with spots of lead here and there—a great and kindly lode. No. 1 stope measured 10 fms. 4 ft., and is re-set to twelve men, at 4l. per ton for lead, and 35s. per fathom for the ground, stented the month; this stope having further improved going west, we have now two pares of men here, and are again beating up an additional piece of ground in this direction; these men are all concerned together, as we have no means of separating their ore underground; the lode altogether here is very large, averaging from 3 to 6 ft. wide, and has in places a magnificent appearance. The new stope, east of the late No. 3 stope, is again let to six men, at 2l. per fathom for the ground, and 4l. per ton for lead, stented the month; this stope measured 2 fms. only, as these men were removed last month to the 70 cross-cut, after the first week, but six men from the winze are now at the 70 cross-cut, and the other three men, with three boys, I have placed in the 35 end, as I consider it most important that this end should be driven with all possible dispatch, for the good lode in the stope has now every appearance of making back over it, which is all whole ground, and we are beginning to feel the want of this level as a barrow road. This 35 end is let at 3l. 12s. per fathom, stented the month. Louisa's shaft measured 1 fm. 2 ft., and is re-set to nine men, at 22l. per fathom, stented the month. The ground here, though a beautiful blue killas, is again more troublesome for sinking, through being interlaced with veins of quartz, spar, &c.

NEW EAST BIRCH TOR AND VITIFER CONSOLS.—W. Skewis, R. Trevarthen, Nov. 14: In the deep adit level we have had a slight crush in the back, and the men are now driving by the side of it for, we think, from 3 to 4 fms. The stope in the back of this level still continues to yield good work for tin.

NEW TRELEIGH.—S. Michell, Nov. 14: The men are getting on pretty well with the work at the 60 fm. level, new shaft, and hope to commence sinking the same next week. In the 60, west of the new shaft, a quantity of water is flowing from the north side of the level, which gives us an idea that part of the lode is in that direction; consequently the end men are driving a short distance to prove it. The part we have been driving on is producing stones of ore. The 51 fm. level west is looking better; the same level, east of the shaft, is yielding good work. The stope in the winze in bottom of this level is producing 3 tons of ore per fathom, impregnated with grey ore; this is the first of the kind that has been seen in this part of the mine. The stope in bottom of the 60, east of new shaft, is producing fully 2 tons of good quality ore per fathom. The lode in the 40, west of the new shaft, is improving—a very kindly end, and ground speedy for driving.

NEW WHEAL TOWAN.—R. Pryor, Nov. 14: On Saturday last we set the adit level to drive west by four men, at 5l. per fm.; the lode continues without much change.

NORTH DOWNS.—Francis Pryor, John Grenfell, Nov. 13: Bennetts' Shaft: The 70, east of this shaft, is presenting a better appearance than it has at any time before since we commenced driving it. The lode is 18 inches wide, very regular, and producing good stones of ore. The winze sinking below the 60, east of shaft, is improving as we get off the slide mentioned in our last, and notwithstanding it is 20 fathoms east of the 70 fathom level end, it is as dry as if there had never been any water in it, being drained by that level.—King's Engine-Shaft: In the 40, east of this shaft, no lode has been taken down since last report, but the wall of it is presenting a better appearance than it has for some time past, and looks as if the lode would unite with the ore in the stope behind the end, where the lode is worth 10l. per fathom. The men are desuing the lode in the rise in the back of this level, and the wall is looking very well for a continuation of ore; the lode, when last taken down, was worth 10l. per fathom. We shall have the lode taken down in these bargains by Saturday next, and will give their value in our setting report. There is no change to notice in any other part of the mine.

NORTH DOWNS.—John Grenfell, Nov. 15: We have commenced taking down the lode in the 40 east, on the south lode, which I am glad to say has very much improved, now worth fully 10l. per fm., as anticipated in our report on Tuesday last. This looks like a continuation of the shoot of ore which is in the stope behind the end.

NORTH JANE.—James Rowe, Nov. 13: I am well pleased to say that we have strong evidence of being nearly through the elvan. This morning, in blasting, we found some stone of killas coming from the bottom of the shaft, and by the end of the week we shall be able to speak more positively about it. As you are doubtless aware, when we get through the elvan we shall be able to make much quicker progress towards the lode.

NORTH LEVANT.—J. Bennetts, J. Thomas, Nov. 14: The 115 is driving east of Law's shaft, at 1l. 15s. per fm.; lode about to pay for driving. The stopes in the back of the same, working at 1l. per fm., are worth 1l. 10s. per fm. The 100 is driving east at 2l. 10s. per fm.; lode worth 2l. 10s. per fm. The 100 is driving north, on Guide, at 3l. per fm. The 85 is driving east, on Wheal Game lode, at 2l. 10s. per fm., worth 2l. per fm. The rise in back of the 85 west, working at 1l. 10s. per fm., produces tin, but not to value. The 70 is driving east, on Wheal Game lode, at 1l. 9s. per fm.; lode worth 2l. per fm. We have 17 pitches, working on tributes varying from 14s. 6d. to 18s. in 1l.

NORTH WHEAL ROBERT.—W. Godden, Nov. 14: The ground in Mayne's cross-cut north, in the 30 fm. level, is not so favourable for driving. Water is flowing very free from the end.

OKEHAMPTON.—J. Richards, Nov. 14: Saturday last was pay and setting-day at the mine. The shaft has been sunk during the past month 13¾ fms.; the ground therein is improved, and the price per fathom for sinking is now 14l., which may be considered exceedingly favourable; last month it was 18l. per fathom. The water-wheel and drawing-machine continue to work very well.

OKEL TOR.—John Rodda, Nov. 15: We are into the lode in the 80 cross-cut about 3½ fms., but have not reached the southern wall. In the end the lode consists principally of capel, spar, and peach, interspersed with strings of mundic and ore. Bate's stope, in back of the 80 east, will yield 4 tons of ore per fm. Reynolds's stope will yield 3 tons, and Tregonning's stope will yield 2 tons of ore per fathom. The lode in the 65 east is producing more quartz, and has a very promising appearance. Oliver's and Stile's stopes, in back of this level, continue to yield 2 tons of ore each per fathom. Peardon's stope will yield 3½ tons per fathom. Hatch's stope has improved, and will now yield from 2 to 3 tons per fathom. The lode in the end, driving east of Hatch's stope, on south branch, is composed of arsenical mundic and ore, and producing of the latter 2 tons per fathom. In the 50 cross-cut, towards the south part of the lode, we have intersected a branch of soft quartz, but have not yet reached the capels of the lode. The lode in the winze sinking in bottom of the 50 east is looking very promising, and producing from 1 to 2 tons of ore per fathom. Burley's stope, in bottom of the same level, will yield 3 tons of ore per fathom. Hill's stope is without alteration. All the machinery is working well.

OLD GUNNISLAKE.—H. Rickard: During the past week Parker's shaftmen have been engaged in cutting ground for bearers and cistern, putting them in, also dividing the lift and fixing the same in the cistern, I hope to complete this to-morrow, which will greatly facilitate our future workings.

PEDN-AN-DREA.—W. Tregay, J. Thomas, Nov 10: Sump: The ground in the 140 fm. level cross-cut is more favourable for driving, and good progress is being made. In the 130 east the lode is worth 5l. per fm.; in the bottom of this level the lode is worth 15l. per fm. In the 130 west end the lode is worth 15l. per fm.; the lose in the stope east of this cross-course is 12 feet wide, worth 20l. per solid fm. The 120 east winze is worth 10l. per fm. In the 120 west end we have come upon Skimmer's lode, which produces fair quality tinstuff, not yet cut through. In the 100 east end the lode is worth 8l. per fm.; in the 100 east the rise is worth 8l. per fm.—Cobbler's: The lode in bottom of this shaft is worth 16l. per fm. The 110 west end is worth 3l. per fm. In the 90 north cross-cut nothing of importance yet intersected, but much water is issuing from the end, and we expect a lode to be near. No other change to report.

PENHALLS.—S. Bennetts, W. Higgins, Nov. 10: The 60 fm. level, both east and west, ends are much the same as last reported as to value; the ground, however, in the east end is apparently getting somewhat easier. The pitches in the back of this level are improved, the lode having been opened out above the gossan, and found just as good as it was below; this looks favourable for the piece of ground between the 50 and 60. The 50 east, on Cowling's, is worth 5l. per fathom, and west 3l. per fathom. The 50 west, on the new lode, is worth 9l. per fathom, and west on the same lode, 5l. per fathom. There has been nothing further seen in the 50 fm. level cross-cut south, nor in the winze below the 40; the ground in each place continues favourable for progress. The tutwork bargains are, on the whole, not quite so well as they were a fortnight since, but the tribute pitches are better.

PENHALE WHEAL VOR.—W. Chappell, W. H. Martin, Nov. 14: The lode in bottom of Sanford's shaft, sinking below the 74, is 3 feet wide, composed of mundic, prian, quartz, and tin, and greatly improved in size and appearance from what it was in bottom of the 74, when we commenced to sink, and which was at that point small and poor. In the 74, east of the same shaft, the lode is

2 feet wide, and of a very kindly appearance, the ground being easy for exploring, and the country thoroughly mineralised, the lode occasionally producing stones of tin. In driving the 74, west of same shaft, the north branch, or main part of the lode, which is 18 in. wide, is producing very rich stones of tin, and as we extend this level west the run of the lode has a southerly direction, and in driving it will form a junction with the south part of the lode, which split off a few fathoms behind the present end. At the junction west we are looking to make a great discovery, as there is a large quantity of water issuing from the lode, which we consider a good omen for being near a rich course of tin. The men are making good progress in driving the 64 fm. level cross-cut south of the same shaft, to cut Penhale and other lodes. We are daily expecting to cut the south lode in the cross-cut in the 38, south from Battye's shaft; we cannot have more than 6 feet further to drive. In driving the cross-cut south from the 74 at Hollingsworth's, to unwater Holroyd's shaft, our progress has been rather slow, the ground at present being somewhat hard; the lode in the 74, east of same shaft, is 18 in. wide, producing tin, but not sufficient to value. In the 64, west of same shaft, the lode is 3½ feet wide, producing good stones of tin, with every appearance of a speedy improvement. We have suspended the rise in back of the 26, west of same shaft, for the present. We shall sell a parcel of tin in the course of next week.

PROSPER UNITED.—J. Nicholls, Nov. 15: The lode in the 90 fm. level, west of Hand's, is 4 feet wide, worth 15*l.* per fm. for tin. The lode in the 80 west is small and poor. The stopes in the back of this level are producing about 12*l.* worth of copper and tin per fm. The 70 west is yielding a little tin. The lode in the 60 west is 18 in. wide, producing 1¼ ton of ore per fm. The lode in the 50 west is 1 ft. wide, yielding saving work for tin. The winze in the bottom of this level is worth 6*l.* per fm. for copper ore. The 40 west is unproductive. The 70, east of Hosking's, has improved for copper ore, and the 80 east is looking promising, although unproductive. No change in the 60 east, or any other tutwork bargains. The pitches are yielding about the usual quantity of copper and tin. Good progress is being made in dressing the copper and tin for the next sampling.

REDMOOR.—Thos. Taylor, Nov. 15: The ground in the south engine-shaft is harder, and more settled. There is a little more water oozing from the eastern end; we have still the flookan in the shaft. In the 45 the lode is small, but containing some good stones of black ore, mixed with silver and lead ore. We are pressing the sinking of the shaft with all speed.

ROARING WATER.—H. Thomas, Nov. 13: There is no alteration in the ground at Gillman's engine-shaft since last reported. The lode in the bottom end, west of Grady's, appears to be getting stronger, particularly in the bottom of the end, and altogether it promises speedy improvement—it will produce more than 1 ton of good ore per fm. There is no particular change in the lode east of the shaft, the machinery working well, and the pitwork in good order.

ROSECLIFF AND TOLCARNE.—R. Pryor, J. Phillips, Nov. 14: We set the following bargains on Friday last:—Lindo's engine-shaft to sink below the 40 by nine men; the ground at this point has within the last 6 ft. sinking been principally composed of spar, which has made it very spare; this shaft is now down about 5 fms. 3 ft. 8 in. below the 40. The 40 cross-cut to drive south of shaft by three men, at 1*l.* 10s. per fm.; this cross-cut is on the great flookan, which have heaved the lode south, in consequence of which we have further to drive than we expected. The cross-cut, to drive north of engine-shaft, by four men, at 3*l.* per fm.; we are glad to state that we have at this point met with the elvan course, in which we have found some fine stones of rich silver-lead; this is the same elvan course that is in the old mine, which made the rich deposits of lead, and since it has been cut we have drained the water from the old mine 7 fathoms below the adit level. Our pay and setting went off well.

ROSEWARNE CONSOLS.—J. Nancarrow, Richard Puckey, Nov. 10: At our monthly survey to-day, the following work was set:—The 100 to drive east of Ellen's, by six men, at 5*l.* per fathom; the lode is small. The 90 to drive east of Ellen's, by two men, at 4*l.* per fathom; the lode yields a little ore. A stope in the back of the 90, east of winze, to four men, at 2*l.* per fathom; the lode is worth 4*l.* per fathom. A stope in the back of the 90, west of winze, to four men, at 2*l.* per fathom; the lode is worth 4*l.* per fathom. A stope below the 80 east, by four men, at 2*l.* per fathom; the lode is worth 6*l.* per fathom. The 80 to drive west of sump, by six men, at 2*l.* per fathom; here we have a very fine looking lode, 2½ feet wide, yielding good stones of ore, letting out plenty of water, and looks as if it would shortly become very valuable. The 70 to drive west, by four men, at 1*l.* 15s. per fathom; the lode is improving in appearance. We have also set six pitches to 13 men, at an average tribute of 12s. 8d. in 1*l.*

ROSEWARNE UNITED.—Thomas Richards and Son, E. Carthew, Nov. 15: Giesler's engine-shaft is sunk to the 90, and the men are now engaged in cross-cutting north to cut the lode below the slide. The lode in the 80 west is 18 in. wide, of a promising appearance, and producing good stones of copper ore; we have a few more fathoms to drive this level before it will be under the dip of the rich bunch of ore gone down below the 70. We have this week holed the winze from the 70 to the 80, which has laid open a good piece of tribute ground. The 30 cross-cut is producing some very good copper ore, and we hope soon to intersect a lode. At our monthly setting-day, on Friday last, the following tributes were set:—Four men at 2s. 3d. and ten men at 3s. 6d. in 1*l.* in back of the 70; two men at 6s. 8d. and three men at 11s. in the 60; six men, at 12s. in the 50; two men at 8s. in the 40; and two men at 12s. in the 20.

SORTRIDGE CONSOLS.—J. Richards, Nov. 13: Hitchins's engine-shaft is in regular course of sinking below the 122, in ground favourable for progress; and as the sinking progresses branches of rich ore are being met with dipping north towards the main lode. In Rowe's rise, in the back of the 40 east, on the south part of the main lode, the lode is worth ⅛ ton of ore per fathom.

SOUTH CALLINGTON.—W. Spargo, Nov. 15: Since last reported on we have driven west across the lode 9 feet, through a mass of gossan and spar of a very promising appearances, and have not as yet intersected the foot or western wall. The lode at this point is all 12 feet wide, and how much larger it is we cannot as yet say. The reason of the lode being so large at this point is by forming a junction to the east and west course, which I mentioned in my former report, and of course we ought to consider this will be of great importance when reached at deeper levels.

SOUTH CONDURROW.—J. Vivian and Son, W. Williams, Nov. 10: King's shaft has been sunk about 5 ft. under the 61, where the lode is from 6 to 7 ft. in width, and more water than we have ever before met with in any part of the mine rising from the bottom of the shaft, through vughs and fissures in the lode. We find this great increase of water rather inconvenient for the present, but look upon it, together with the increased size of the lode, as indicative of a great and favourable change. In the 51, east of King's shaft, the lode is 2 feet wide, containing more quartz and less iron than it has done; in the same level west the lode is 5½ ft. wide, composed principally of chlorite and quartz, with some good tinstone and spots of yellow copper ore, which will pay for dressing, the appearance being altogether very favourable. Vivian's shaft has been communicated to the 40. In the 40, west of Vivian's shaft, the lode has been disordered by a crossing branch, but we think it will in driving a few feet again improve. In the 30, west of Vivian's shaft, the lode is 1½ ft. wide, composed of mundic, chlorite, and spots of yellow copper. In the 20 west the lode is 1½ ft. wide, composed of quartz and prian, with mundic scattered throughout it. There is nothing new to remark on in any other part of the mine.

SOUTH DARREN.—J. Boundy, Nov. 10: The lode in the 60 west is 2½ feet wide, of a very promising character, consisting of a beautiful mineralised killas, sugar-spar, carbonate of lime, copper, and lead ore, valued at 12*l.* per fm.; the large quantity of water issuing from the lode at this point confirms my opinion of there being a more productive lode near at hand. There is no change to notice in the 50 west since my last report. I wish to observe here that the ground which has been passed through in the 40 over this point is very similar to the ground which we have passed through of late in the 50; as soon as the end is got off from the influence of the cross-course it is my firm opinion we shall have a productive lode. The lode in the 40 west is large, and of a very promising character. The lode in the 30 west is 20 in. wide, presenting a promising appearance, producing a little lead and copper ores, but not quite enough to value.

SOUTH DOLCOATH.—W. Roberts, Nov. 14: I have nothing particularly new to notice here, except that the pitches are producing fair quantities of ore, and we hope to sample next time, Nov. 27, about 50 tons of ore.

SOUTH HERODSFOOT.—Wm. Goldsworthy, Nov. 14: The ground in the engine-shaft is now very favourable for progress, being a pretty blue killas. We are obliged to stop the engine to-day in consequence of the fly-wheel getting loose in the shaft, but we hope to set all right to work this evening.

SOUTH OF SCOTLAND MINING COMPANY.—Philip Hawke, Nov. 6: The shaftmen at present are busily engaged in dividing, casing, fixing footway, &c., from the 18 to the 30 fm. level. I have a pare of men at the latter level driving for Clark's lode, which we hope to reach in a few days; we shall then push the driving on this lode to the junction with the No. 5 with all dispatch. The stope in the back of the 18, near or at the junction of the No. 1 and No. 5 lodes, continues to yield from 2½ to 3 tons of lead per fathom, or I would say, judging from the quality of the metal, from 40*l.* to 45*l.* per fathom; the leader of lead varies in size as we progress with the stoping; it has been 4 in. wide, 6, 12, and 2 ft. solid metal. Such information as this will, I hope, cause those who thought their stock of late to be almost valueless to look upon it in future as a prize, on account that the prospect which we have both in the back and bottom of the 18 is a sufficient guarantee of what the deeper levels will shortly and most decidedly disclose. I am pleased to report, in addition to the above, the No. 1 lode being struck at the 10, at the flat-rod shaft, on squaring the cross-cutting with the driving on to the wall of the lode, I observe rich spots of yellow copper, and pretty prills of lead. We commence to-day to cut through the No. 1 lode, on the north part of the mine. I would remark that the steam-engine, water-wheel, drawing-machine, with all the appliances and gear work, continue to work admirably.—P.S. My report is a hasty one; during writing I have to attend two gentlemen, one has just returned from underground, and has witnessed a vein of lead at this moment 20 in. wide—solid, and broke specimens therefrom.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Nov. 10: We are forcing down the engine-shaft as fast as possible, the ground being of a favourable granite for sinking. We have not taken down any lode this week, as we want to force down the shaft in the least possible time.

TIN HILL.—W. H. Willcock, Nov. 15: We are making good progress here. Most of the machinery is removed to the western portion of the sett, and as soon as the water-wheel, stamps, and floors are in their new positions tin will be returning, as we have heaps of rich tinstuff ready for stamping. By Christmas we hope to be in the market. There is no better tin in the county than the produce of this mine.

TOLCARNE.—Nov. 14: New North Lode: In the 60, west of the cross-cut, we have a large, kindly lode, 2 feet wide, producing 1 ton of ore per fathom, and is very promising for improvement, worth 3*l.* 10s. per fathom; price for driving is 7*l.* per fathom. The lode in the 50, west of the cross-cut, is 2 feet wide, producing over 1 ton of ore per fathom, worth 4*l.* per fathom; price for driving is 4*l.* per fathom. In the 40, west of the cross-cut, the lode is 16 inches wide, producing 1 ton of ore per fathom; worth 3*l.* 10s. to 4*l.* per fathom. The lode in the 20, west of cross-cut, is small and poor.—Field's Lode: In the 40, east of Field's shaft, the lode is 16 inches wide, consisting of gossan, soft spar, and stones of ore—a promising-looking lode. The lode in the 30, east of Field's, is 15 inches wide—a kindly lode, producing stones of ore, but not to value. The ground in the adit level cross-cut south consists of a stiff killas, and is letting out a quantity of water.

TREVENEN AND TREMENHEERE.—J. Medlin, C. George, Nov. 14: The 197, east of Trevenen shaft, is fair and congenial for producing tin again shortly. The stopes in this back are worth 8*l.* per ton. The 162 fathom level cross-cut, towards the south lode, is progressing favourably, and we hope to cut the lode here in another month. The lode in the winze sinking below the 150, before the 162, is worth 20*l.* per fm. The 150, east end, yields a little tin, but not enough to value. The lode in this level, west of junction, has become more contracted, and yields a little tin, but not to value. No. 1 stope, in this back, is worth 7*l.* per fathom; No. 2, 10*l.* per fathom; and No. 3, 9*l.* per fathom. The 135 fathom level end, east of the old east shaft, is worth 6*l.* per fathom. No. 1 stope, in this back, is worth 8*l.* per fathom; No. 2, 6*l.*; and No. 3, 5*l.* per fathom. The 130 is put through the choke in the old sump-shaft to-day. We see large workings beyond this shaft, which seems to be clear of attle, but the survey of this place is not yet made, but we shall go on through it to the end of the ground as fast as possible.

VIGRA AND CLOGAU.—W. J. Holman, Nov. 15: At the old Clogau Copper Mine the water is forked out to within 3 ft. of the bottom; we expect to have all the water out of the mine by to-morrow, when we shall be able to go through the old workings. In the drivage west from No. 1 shaft, in No. 2 mine, the lode maintains an average width of 9 ft., and, as previously reported, produces stones of quartz, containing visible gold. Other works at the mine are without change. At the reduction works 16 heads of stamps are kept continuously at work.

WALKHAM AND POLDICE.—J. Lean, Nov. 15: The 50 south, on lead lode, is set to six men, at 5*l.* per fathom; the leader part of the lode is about 4 feet wide, with lead ore disseminated throughout, producing some saving work, which presents a very promising appearance; indeed, I hope soon to see as good a lode in this level. The lode is standing entire to surface, and still gaining ground fast as we extend south into the hill. The 50 west is let to four men, at 5*l.* per fathom; here the ground is becoming more settled, and looking more promising. The 38 west is set to four men, at 3*l.* 10s. per fathom; the leader part of the lode is 18 in. wide, producing capel, mundic, and copper ore.

WEST CARADON.—Wm. Johns, N. Richards, Nov. 14: The ground in the 170 cross-cut, south of Elliott's engine-shaft, is a little harder than we ever expected, otherwise we should have reached the eastern part of Downing's lode ere this; however, by the cross-branches we are intersecting in the cross-course and by the indications showing with a little water oozing from the end, we are quite certain the lode cannot be far distant. We have opened out about 4 fms. east on the branch cut in the 170, and for this distance looks very encouraging. On the same branch, west of cross-cut, it is not so good, but the ground is everything that can be desired for mineral. In Vivian's lode, in the 170 west, a branch of ore is coming in from the bottom of the end, and we hope shortly to report favourably thereon. Clymo's lode in the 92, west of cross-cut, is 1 foot wide, spotted with ore; the cross-cut is still driving south, with a view of cutting Jope's lode. We are pushing on as fast as possible the 116 north, on the little cross-course (Jope's lode) to intersect the other part of the lode; we have a similar class of ground here as in the level above before reaching the lode. Up to this date we have no change to notice in any other tutwork operation. We are busily engaged costeaning in the unexplored piece of ground in search of the back of the lodes before we decide where the engine-shaft shall be commenced. Our sampling is much the same as usual—161 tons (computed) of copper ore.

WEST SHARP TOR.—Wm. Richards, Nov. 12: The part of the lode being carried in the winze in the 150 contains a little copper ore, but the ground has become more compact. The lode in the winze in the 162 yields about the same quantity of ore per fathom, but the progress is slow, owing to the tightness of the ground. We are not yet through the lode in the 174 fm. level cross-cut; it contains a little rich ore, and the water is on the increase.

WEST WHEAL TOLGUS.—Nov. 14: Taylor's sumpmen have fixed the new drawing-lift from the 75 to the 85, and are now engaged in removing the old lift; in a day or two we hope to commence sinking again. The lode in the 85 east is 2½ ft. wide, producing 2 tons of ore per fathom, worth 8*l.* per fathom; price for driving, 8*l.* 10s. per fathom. In the 85 west the lode is 4½ ft. wide, producing 5 tons of ore per fathom, worth 25*l.* per fathom; price for driving, 5*l.* 10s. per fathom. In the rise over the back of the 85 west the lode is 2 feet wide, producing 2 tons of ore per fathom, worth 8*l.* per fathom; price for rising, 6*l.* 10s. per fathom. We hope to communicate to the winze sunk from the 75 in two or three days. In the 75 west the lode is 2 ft. wide, looking promising, but is poor. The lode in the 75 east is 2 ft. wide, producing 1 ton of ore per fathom, worth 3*l.* 10s. per fathom: price for driving, 5*l.* 10s. per fathom. We have five stopes over the back of the 75, three to the west and two east of the shaft, working by 30 men, at an average price of 3*l.* 8s. per fathom; the average yield is about 3 tons of ore per fathom, worth from 10*l.* to 12*l.* per fathom. In the 65 west the lode is over 4 ft. wide, consisting of spar, capel, and good stones of ore, and letting out a large quantity of water—a kindly lode. In the rise over the back of the 65 west the lode is 2 ft. wide, producing stones of good ore, and is looking very promising for improvement. We have two stopes over the back of the 65 west, working by 12 men, at an average price of 2*l.* 10s. per fathom. One stope is producing 4 tons of ore per fathom, worth 18*l.* per fathom, and the other 3 tons of ore per fathom, worth 12*l.* per fathom. In the 50 west the lode is 2 ft. wide, consisting of flookan and spar, containing spots of ore.

WHEAL AGAR.—Wm. Roberts, Nov. 14: We have holed the winze from the 130 to the 140, and thereby opened a tolerably good piece of tribute ground. The men are now driving the 140 east, in which the lode, or part being carried, is 4 ft. wide, producing good work for tin. We are also cross-cutting north a little behind the present 140 end to ascertain the size of the lode; good work for tin is being broken here. In the 130 east the lode is 4 ft. wide, producing low quality tinstuff. In the 110, east of the western shaft, the lode has improved in appearance, and produces occasional stones of ore.

WHEAL BULLER.—J. Inch, Nov. 14: Stevens's shaft, sinking under the 80, is worth for tin 10*l.* per fm. The 80, west of this shaft, is worth 25*l.* per fm. The 80 east is worth 40*l.* per fm. The 70 east is producing low quality work for tin.—Hocking's Shaft: The 80 east is worth 5*l.* per fm. The 70 east is worth 6*l.* per fathom. The 70 west is worth 5*l.* per fm. The winze sinking under the 60 is producing low quality work for tin. There is no alteration to notice in any other part of the mine.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Nov. 10: We have not been able to take down any lode this week in the 120, east of shaft, but which we shall do next week, when you shall be fully advised. The lode in the 120 end west is 2 ft. wide, and producing low stamping work. Two stopes above this level are worth 5*l.* 10s. per fm. each. Two stopes above the 110 are worth 6*l.* and 7*l.* per fm. The lode in the 100 east is small, it being squeezed, as it were, with a hard elvan. Two stopes above this level are worth 7*l.* and 5*l.* per fm. The stope below the 90, east of shaft, is worth 10*l.* per fm. Two stopes above this level are worth 6*l.* and 8*l.* per fm. The ground in the 90 cross-cut north is without any change. The stope above this level is worth 5*l.* per fm. The lode in the 80 east is split into branches that contain some very good tin. The lode in the stope above this level is worth 5*l.* 10s. per fm. The lode in the rise above this level is worth 8*l.* per fm. The lode in the 66 east is 3 ft. wide, with a good leader of tin on the footwall, worth 8*l.* per fm. Two stopes above this level are worth 6*l.* and 7*l.* per fathom. The lode in the 66 west is small. The lode in the stope above this place is worth 6*l.* per fm. The lode in the stope above the 54 east is worth 6*l.* per fm. The lode in the boundary shaft is 18 in. wide, of gossan and quartz, with good stones of ore; this continues perfectly dry, and is of a very favourable character.

— G. R. Odgers, W. Bennetts, Nov. 15: The lode in the 66, east from the new shaft, is 3 feet wide, and worth for tin 10*l.* per fathom. All the other places are looking much the same as we stated on Saturday.

WHEAL IDA.—F. C. Harpur, Nov. 13: The driving of the cross-cuts, both north and south of the engine-shaft, in the 40, is being carried on as fast as we possibly can. The ground in the former is for the time rather hard and troublesome, consisting of clay-slate, traversed by small veins of spar, intermixed with some mundic and spots of silver-lead. In the latter the ground is more easy for exploring, letting down a little water, which causes us to think that we are approaching a lode or branch.

WHEAL KITTY (St. Agnes).—S. Davey, Wm. Polkinghorne, Nov. 10: The lode in the 82, driving west of Holgate's shaft, is unproductive.—Pryor's Lode: In the new shaft, sinking below the 65, the lode is 8 ft. wide, but is lessened in value at present in consequence of a small gossan having crossed it, now worth for tin 35*l.* per fm. In the 65, driving west of said shaft, the lode is 2 ft. wide, and worth for tin 15*l.* per fm., with a good appearance. In the 65, driving east of shaft, the lode is poor. In the 54, driving west of shaft, the lode is 5 ft. wide, with a more promising appearance, worth for tin 8*l.* per fm. In the 54, driving east of shaft, no lode has been taken down since last reported. The lode in the 44, driving west of shaft, has much improved during the week, now 4½ ft. wide, and worth full 18*l.* per fm. for tin. In the 44, driving east of shaft, the lode is much the same as last reported, and worth for tin 4*l.* per fm.—Wheal Vottle Lode: In the 44, driving west of cross-cut, no lode has been taken down during the month. In the 24, driving east and west of cross-cut, the lode has improved, now worth for tin 6*l.* per fm.

WHEAL KITTY (St. Agnes).—William Teague, W. Polkinghorne, Stephen Davey, Nov. 15: In the 82, on the old lode, driving west of Holgate's shaft, the lode is yielding saving work for tin.—Pryor's Lode: In new shaft, sinking under the 65, the lode is worth for tin about 20*l.* per fathom for the length of the shaft. In the 65, driving west of new shaft, the lode is worth for tin 25*l.* per fathom—a very kindly lode. In the 65, driving east of shaft, the lode at present is poor. In the 54, driving west of shaft, the lode is worth for tin 8*l.* per fathom. In the 54, driving east of shaft, the lode is at present unproductive. In the 44, driving west of shaft, the lode is worth for tin 20*l.* per fathom. In the 44, driving east of shaft, the lode is worth for tin 4*l.* per fathom.—Vottle Lode: In the 44, driving west of cross-cut, the lode is producing rich stones of tin, and improving in size and value as we get clear from the influence of the cross-course. In the 24, driving east and west of cross-cut, the lode is worth for tin 6*l.* per fathom—a very kindly lode, and, we think, will amply pay for the trouble and expense we have been put to in reaching the same; this lode has been cut, you are fully aware, since the last meeting of the adventurers, and holds out great promise. On the whole, our prospects are greatly improved during the last quarter, and all we require to enable us to resume the former dividends is a better price for tin.

WHEAL KITTY (Uny Lelant).—W. Rosewarne, Nov. 15: North Russoe Lode: We are making good progress in putting in the tramroad in the 140 fm. level, east of Bolitho's rise. The lode in the 130 fm. level, east of Bolitho's rise, is unproductive. The lode in the 130 fm. level, west of Bolitho's rise, is worth 3*l.* per fathom. The lode in the winze sinking below the 120 fm. level, west of Bolitho's rise, is worth 3*l.* 10s. per fathom.—Gowan Lode: The lode in the 80 fm. level, east of Rogers's shaft, is worth 6*l.* per fathom.—North Gowan Lode: The lode in the 80 fm. level, west of Rogers's shaft, is yielding a little tin. The lode in the 60 fm. level, west of Rogers's shaft, is worth 7*l.* per fathom. The lode in the rise above the 60 fm. level, west of Rogers's shaft, is worth 6*l.* per fathom.—South Russoe Lode: The lode in the boundary shaft, sinking below the 10 fm. level, is improved, now producing good stamping work.

WHEAL SPARNON.—W. Tregay, E. Chegwin, Nov. 10: Sump: The pitwork is now completed to the 60, and arrangements for continuing the sinking below that level can quickly be made. The stope in the bottom of the 60 west is worth 15*l.* per fathom.—New Lode: The rise in the back of the 20 east is not yet through the elvan; the lode is producing stones of copper ore, and letting out much water.—North Cross-Cut: We have come into a choke in the level, which we expect is occasioned by the intersection of the north lodes; we shall clear this as rapidly as possible.—South Lode: The lode in the 45 east produces much mundic and fair quality tinstuff; we expect an improvement on getting a little beyond the influence of the cross-course.—Middle Lode: The lode in the 50 east produces good stones of copper ore, and promising improvement.—Cobalt Lode: The lode in the back and bottom of the 45 south is as promising for the production of cobalt as can possibly be conceived, containing much cobalt bloom and occasional stones of that mineral.

WHEAL TREMAYNE.—Richard Williams, Nov. 14: The winze sinking under the 11, east of No. 1 shaft, on the new south lode, is down 4 fms.; the lode for the last 9 ft. has been disordered, and mixed up with killas, which is now disappearing towards the western end, and the lode 20 in. wide, yielding good tinstuff, worth 6*l.* per fathom, with a favourable appearance. The water is still rather troublesome.

WHEAL UNY.—S. Coade, M. Rogers, Nov. 10: The 120, east of engine-shaft, is worth 15*l.* per fm. for tin; we shall open on the lode to ascertain the width and quality before we drive east, as we have the cross-course. The 110 east is near the cross-course; when we intersect it we shall rise a winze to the 100, then we shall have a quantity opened up for 20 fms. high from the 120 to the 100; the lode in the end is worth 10*l.* per fm. The lode in the 100 east is of a promising character, worth at present 7*l.* per fathom. The lode in the 120, west of incline shaft, which we have been opening on in the north part, is looking well; we have not drawn the stuff yet, but shall do so next week, when we shall ascertain its value. The men in the 130, incline shaft, have been engaged in bringing down skip-road to that level, which will be done to-day for drawing on Monday.

AUSTRALIAN MINES.

YUDANAMUTANA COPPER.—The superintendent (Adelaide, Sept. 29) states—"I am pleased to report that several horse teams besides those of the Carrying Company are now on the road, and from Aug. 1 to present date some 30 tons of our produce have been brought to port. I have shipped, in addition to the 16 tons of metal I advised in my last, 23½ tons of copper, and from this date there will be from 9 to 11 tons of copper made per week." Capt. Anthony (Sept. 22) reports—"Blinman Mine: Six men are employed stoping the bottom of the 10 fm. level, north of No. 4 shaft; the lode is 7 to 8 ft. wide, composed of ore of 14 per cent. as broken. During the last five weeks we have smelted in No. 1 furnace the following ore—42 tons of burrows, 37 tons of smalls, 28 tons of third and fourth class ores, and 14 tons of slags, and from this 121 tons of ore have produced 22½ tons of copper of 95 per cent. No. 2 furnace will be lit to-morrow, and No. 3 is being completed. I have made with No. 1 furnace, up to date, 87 tons of metal. Excellent sand is now obtained in any quantities for the smelting works. About 3600 tons of firewood have been delivered on the mine. Since my last (Aug. 18) I have sent to Port Augusta 23 tons of copper.

KAPUNDA.—The quantity of ore raised in August was estimated at about 254 tons. Since the date of the last advices 65 tons of pure copper had been shipped for England.

WORTHING.—At Bremer Mine the raisings of ore during the month had been 250 tons, and 35 tons of regulus had been delivered to the Copper Company. In consequence of the very low price of copper, the necessity of wages being reduced had been laid before the men, and they had cheerfully acceded to it. Costs for the month 1382*l.* Notwithstanding the present price of copper, the acting manager and Captain Prisk write in cheerful tones, and expected to continue raising sufficient to pay costs, and also to cut the lode in the 73 fm. level before next mail; the indications for being cut rich were very good. As soon as the shaft had been been cased they would be ready to sink to the 83 fm. level. Number of hands employed 141.

ENGLISH AND AUSTRALIAN COPPER.—The coal at Kooringa on Sept. 29 was 230 tons, at Kapunda 228, and at Port Adelaide 689 tons. There were three furnaces at work at Kooringa, and one refinery at the Port works. Since date of last advices 350 tons of copper had been shipped.

YORKE PENINSULA.—Operations at the Kurilla Mine continued to be temporarily suspended pending the arrival of the further credit which left London in August, and which will have been received early in October.

PORT PHILLIP AND COLONIAL GOLD.—Mr. Bland (Clunes, Sept. 26) says—The following is the return for August: Quartz crushed, 4649 tons; per week, 1162 tons; per head per diem, 3 tons 1 cwt. Quantity of gold obtained, 1447 ozs. 12 grs.; yield per ton, 6 dwts. 5 grs. Receipts, 5542*l.* 14. 5*d.*; payments, 4566*l.*; profit, 976*l.* 3s. 4d. Amount divided between the two companies, 1000*l.* Port Phillip Company's proportion, 650*l.* This return shows an improvement in the yield of the quartz of 8 grs. per ton. The total yield, however, is under that of July by 2¾ grs. per ton, caused by the small quantity of pyrites operated upon last month, 8¾ tons against 39 tons for July. I am happy to say the yield has gone up considerably since closing the August accounts.—Mine: Almost every portion of the mine has greatly improved in appearance during the last few weeks, as evidenced by the yield, which has during the last four weeks averaged a little over ½ oz. to the ton from 4375 tons. Without the addition of any gold from the pyrites, it has gradually gone up in that period from 7 dwts. 20 grs. to 13 dwts. 3 grs. Preparations are now being made to resume sinking the main shaft, and I expect this desirable work will be commenced in a very short time, and I hope continue without interruption for another 12 fms. for a No. 6 level. Further samples from the mine have been crushed separate. The samples from Robinson's reef, from the 444 feet level, which yielded 11 dwts. per ton, is very satisfactory, this being the lowest working in the mine, and offers great encouragement for opening out the mine in depth. The sample from the western reef at the 300 feet level, which yielded 1 oz. to the ton, is a portion of the reef that was abandoned some months since as too poor to work. A short distance further driving has disclosed this bunch of rich quartz. The machinery is all in good order, and working well. The return for the first four weeks of September is—4375 tons crushed, 2255 ozs. gold, or an average of 10 dwts. 7 grs. per ton. This return is most satisfactory, and we have another fortnight to complete the month, which this time will include six weeks, so as to complete the year of 52 weeks." The following remittances have been received: 600*l.* on dividend account, and 272*l.* 12s. 4d. amount of invoice. Mr. Bland further states—"I fully expect to have a considerable sum to remit next month on dividend account. The result of four weeks' work leaves a profit of 4500*l.*, and there are two more weeks to complete the month."

SCOTTISH AUSTRALIAN.—The sales of coal from Lambton Colliery for August amounted to 12,956 tons. Mr. Morehead, the general superintendent, writes—"Since I last wrote I have been to Lambton, and was much pleased with the state in which I found things there generally."

CADIANGULLONG CONSOLIDATED COPPER.—During the month there were sampled from the mine 132 tons of ore, of a quality ranging from 6⅛ to 33⅓, average 12½ per cent. for copper, and yielding by assay 16⅔ tons of fine copper. Capt. Holman reports that the various workings in operation in the northern and southern sections of the mine are yielding moderately ores of a similar character to the above, with the prospect of improvement at several points—Smelting Works: There have been shipped to London 26 tons of fine copper, per *Sir William Wallace* and *Sir John Lawrence*, about 30 tons more had been dispatched to Sydney, and there were about 28½ tons in a state of forwardness at the smelting-works. Ore on hand 68 tons, wood 333 tons.

FORTUNE.—Mr. Lionel Samson (Freemantle, Sept. 28) writes—"The quantity dressed this month (August) is 70 tons of lead ore and 12½ tons copper ore. The stocks of ore are 104½ tons lead ore and 27 tons of copper ore at the mine; 354½ tons of lead ore and 72 tons of copper ore at Champion Bay."

OTEA COPPER.—The directors have received a report from Capt. Higgins, addressed to the colonial agent, and dated Sept. 3, which states that the lode in the winze sinking from shallow level to high backs has greatly improved, producing ores of good quality, from 15 to 20 cwts. per fathom. "I have in previous reports alluded to the importance of this winze, as it proves the ground to contain ore in paying quantities, equal to the estimate given by me at the commencement. I expect to communicate with high backs in about six weeks. The lode in the lower north stope has yielded ores equal to the average. It must be gratifying to the shareholders to know we have commenced to prepare ore for the crusher—tramming vein stuff on the floors at the rate of 50 wagons per day. I expect to commence crushing in earnest in the course of a fortnight, and am doing all that I possibly can to be in full operation by the time stated. If the mine and money were my own I could not do it sooner. The carpenters' work is very tedious. In fixing dressing floors on our scale, in order to treat 100 tons of vein stuff per day, our fixtures, of course, must be in accordance. I will furnish you with a detailed statement as soon as the machinery is running. I notice by your letter that you are anxious to know the probable amount of dressed copper ore we shall have by the end of the year; of course this depends on the action of the machinery. If no breakage of any kind occurs, you might look out for conveyance of 300 tons." Under date Sept. 9, the colonial agent writes—"With reference to the last part of Capt. Higgins' report, I have only to observe that I am in negociation with the agent for the ships *Winterthur* and *Ida Zeigler*, for the conveyance of about 300 tons of ore, more or less, to be shipped about the end of the year."

MOONTA MINING COMPANY.—The fifth annual report showed that for the past six months the yield of ore amounts to 11,066 tons, of an average produce. The low price of copper, and the realisation of so much produce in a falling market, have materially diminished the profits during the past six months. Three dividends of 5*l.* each have been paid during the half-year, and in plant upwards of 8000*l.* has been added to the value of the company's property at the mines. An improved system of dressing the low percentage ores has been introduced upon the mine, from which considerable benefit is expected to accrue. The railway between Moonta and Wallaroo is now in full operation, and has proved very advantageous to this company.

VALUABLE NUGGET.—A nugget, weighing 78 ozs. 3 dwts., was found in Sandy Creek, near Maldon: it was sold for 310*l.* 12s.—*Melbourne Argus.*

YUDANAMUTANA COPPER COMPANY.—This company's property at Blinman, after having been held back so long by the severe drought, is now beginning to look up again, some 40 men, exclusive of charcoal burners and wood splitters, being employed. Capt. Anthony, in his underground report of Sept. 22, says—"Six men are stoping the bottom of the 10, north of No. 4 shaft; the lode is from 7 to 8 ft. wide, composed of ore of 14 per cent., as broken. The smelting operations under Capt. Anthony's management are going on satisfactorily. No. 1 furnace has run, from Aug. 1, 44 tons of rough copper of 95 per cent.; No. 2 furnace he reports would be lit on the 23d inst.; and No. 3 will shortly be completed. The present slags vary from ¾ to 1¼ per cent. Excellent sand is now obtained in any quantity close to the mine. The feed in the neighbourhood is tolerably good, and large contracts for wood have been made, and may still be procured if desirable. The *Cuonatto*, now at Port Augusta, has on board about 27 tons of ore, of high percentage, and about 39½ tons of copper pigs, representing a money value of about 4500*l.* On the whole, it appears that the affairs of the company have been at their worst, and that a successful future is now before them. A reliable system of cartage by the South Australian Carrying Company is now fairly established between the mines and Port Augusta, so that if the drought should unhappily continue their workings will scarcely be interrupted, while if the season should continue favourable operations on a much larger scale will be at once commenced."—*South Australian Register*, Sept. 28.

COPPER IN SAINT DOMINGO.—A correspondent of an American journal narrates a trip to the new copper mines of the Dominican Republic, which are now being extensively worked by American capital. After describing the extraordinary productiveness of the locality, he supports his testimony with the following extracts from an official letter:—"The already known copper fields extend some 20 miles from east to west, and 10 to 12 miles across to their northern margin. These new features and another class of minerals, among which gold is found in various forms and combinations, supersede the especial sway of copper. I hesitate to repeat what I have personally seen and positively known of the ore veins permeating these hills in almost every direction. The statements might seem exaggerated even to those familiar with the ray bed of our Lake Superior or California copper mines. I will, therefore, simply quote a few facts from a late scientific report, dated July 30, 1866, of Engineer Kereschkel. He there states, with exact truth, that these mountains are threaded by rich veins of copper in such singular abundance that they can only be compared to the network of an immense spider web. These veins generally run north from 10° to 20° west, but in some cases they range within a few degrees of east and west, most frequently deviating in a descending line 70° to 80° from the horizon. The copper is found in them in the following combinations:—First, copper appears in carbonates, malachite, lapis lazuli. This combination shows as high as 75 per cent. of metallic copper. Second, oxides, mixed with iron, cobalt or antimony, showing 55 per cent. of metallic copper. Third, copper pyrites, in various combinations, yielding from 25 to 35 per cent. of metallic copper. Fourth, copper and nickel, in various combinations, showing an average of 30 per cent. of copper and 4 per cent. of nickle." These mineral combinations are found in

surrounding rocks of slate, diabar, and quartz, which casing contains from 10 up to 30, 40, and even 50 per cent. of copper. The presence of nickel and silver in all these combinations is stated to be ample to pay the whole expense of mining the ores.

CHONTALES GOLD AND SILVER MINING COMPANY.—Advices were received by the directors by the mail of Wednesday, the 14th inst., that Capt. Hill, R.N., and Mr. Truran, the commissioners sent out to investigate the company's affairs at the mines, arrived there in good health on Sept. 22. Their report is encouraging for the speedy progress of the works, and for the organisation of the establishment at the mines. The lodes in the cross-cut at the Consuelo Mine, regarded with so much interest, has been cut 3 feet wide, of a very promising appearance, but not productive at the point of intersection. It is, however, expected in driving east to fall into the rich vein that went down from surface. The necessity to employ hands to complete the buildings for the accommodation of the men, and also the roads from mine to mine, has prevented any remittance of gold this month; about 300 ozs. have, however, been returned at the mines. The general prospects of the mines appear to warrant the expectations of good results when the necessary machinery is erected and in working order. Dr. Robinson reports the establishment to be in good health.

FRONTINO AND BOLIVIA MINING COMPANY.—In consequence of numerous enquiries, we are authorised to state that the Chairman, Mr. G. Noakes, being unable to attend to its duties, resigned his seat at the board in September last.

PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.—The advices by the last mail state that the quartz crushed during August was 4649 tons, and the quantity of gold obtained 1147 ozs.; yield per ton, 6 dwts. 5 grs.; receipts, 5542*l.*; payments, 4566*l.*; profit, 976*l.*; amount divided between the two companies, 1000*l.*; Port Phillip Company's proportion, 650*l.* The return during Sept. was 4375 tons crushed, which yielded 2255 ozs. of gold, or an average of 10 dwts. 7 grs. per ton. The remittances received were—600*l.* on dividend account, and 272*l.* amount of invoice. The resident director (Mr. Bland) states that he fully expects to have a considerable sum to remit next month on dividend account. The result of four weeks' work leaves a profit of 4500*l.*, and there are two more weeks to complete the month. The total yield of gold from the Clunes Mine has been 181,929 ozs., of the value of 713,893*l.*

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CASTELL CARN DOCHAN.—The quantity of quartz stamped and amalgamated last month at this mine was 200 tons, which yielded 56½ ozs. of gold, making a total or 1564 ozs. from 3348 tons of lode-stuff.

WEST MARIA AND FORTESCUE MINE has been thoroughly inspected and reported upon by Capt. James Seccombe, of Liskeard, and the publication of his report is advertised in another column of this day's Journal.

NORTH CROFTY.—The improvements at this mine continue, and the state of affairs are so much changed for the better, that at the meeting to be held shortly no call will be required. The returns are greatly increased, and a better price for tin would enable North Crofty to resume dividends.

PENHALE WHEAL VOR.—The workings here appear to be close to great deposits of tin of similar character and extent to the large masterly Great Wheal Vor lode, and it may be safely asserted that no progressive mine in the Great Wheal Vor district offer such indications of a great and profitable tin mine. The returns of tin have been about 4 tons per month since the engine went to work. The mine is in fork at the whole of the different shafts, and vigorous tutwork operations on the course of the different lodes are now being carried on, and great improvements are daily expected.

SHROPSHIRE MINING COMPANY.—It should have been 60 tons of copper ore were sold from these mines on Oct. 29, and not 6 tons, as stated in last week's Journal.—JOHN KITTO.

SOUTH CALLINGTON.—The prospects of this mine were never better than at present. By reference to the report in this day's Journal it will be seen that they have driven west across the lode 9 ft., through a mass of gossan and spar of very promising appearance. All indications point one way—to a highly prosperous mine in the future.

CARNARVONSHIRE CONSOLS.—The mines were visited at the close of last week by some large shareholders, who were much gratified at seeing the rich lead ore they are bringing up from the Coedmawr Pool Mine. Capt. Kitto has commenced driving the deep adit, and as they advance on the lode upon which it is being driven the water considerably increases in quantity, and they are pretty confident in the expectation of soon cutting lead in their progress.

[ADVERTISEMENT.]

From Messrs. WARD and JACKMAN:—About this season of the year a general indisposition prevails on the part of capitalists to effect purchases of any magnitude, and thus many good shares which are influenced in some degree by "supply and demand" will, doubtless, decline without any visible cause. In making these remarks we do not abate one tittle in our previously expressed convictions that mines afford a wider range for profit now than any other security. Our best dividend mines are, of course, free from debt, have large reserves, and pay regular dividends of from 10 to 20 per cent. on "present prices," and these are facts which the most sceptical must admit; therefore, those who look more to the mineral indications of their property than the market ones will do well to pause before sacrificing their shares in these temporary times of depression. We have from time to time noticed in these pages such properties as might, from their position and general character, after careful inspection, seem suitable for investment, and we leave our friends to judge with what success. We have the pleasure of announcing further improvements this week in some of these mines, and we now, as usual, annex a few extracts from our correspondents respecting them. At NORTH CROFTY the mine has considerably improved, and with a better price for tin would now give good profits. It is expected that no call will be required at the next meeting, which will be held shortly; and they have sold 17 tons of tin this month. A report from recent inspection we shall be happy to show any who are interested. At WHEAL BULLER the lodes have fluctuated in value, as in all other mines; whether Devon Great Consols or Prince of Wales, the value of the different points of operation does not continue for "a day" together exactly the same; for instance, at Wheal Buller last week the 80, west of Stephen's, was valued at 18*l.*, and this week at 25*l.*—Hocking's Shaft: The 80 east, on the north tin lode, has improved. On the other hand, Stephen's shaft, sinking under the 80, last week was valued at 12*l.*, and this week at 10*l.* The 80 east was worth about 50*l.*, and now about 45*l.* The 70, east and west, are worth the same, and no alteration elsewhere. We beg to suggest that, as at present there are comparatively no enquiries for these shares, now is the time to buy them. At GREAT RETALLACK another silver-lead lode in the adit, 14 fathoms deep, has been met with; it is equally if not of more promising appearance than the first lode. The engine is being removed with dispatch, and will shortly be at work, when it will command operations on both lodes at once. At WEST CARADON, Doudney's lode, in the eastern part, is daily expected to be cut, when something good is fully anticipated. The new branch in the 170 fm. level is opening out very encouragingly, and Menadue lode still maintains its value. The next sale of ore, at the end of this month, will be 161 tons. At EAST CARADON the ends are valued this week at 44*l.*

IMPROVED SHAKING-TABLE.—In the shaking-table invented by Mr. W. B. FRUE, of Houghton, Michigan, the top of which is made undulating, or so that it forms a series of concave troughs in which the ore lodges, and which are provided with projecting points or teeth, and with discharge channels, in such a manner that by the motion imparted to the table, and by the action of the projecting teeth, the ore is thoroughly agitated, and the heavy parts are made to pass through the discharge channels, while the waste is thrown off over the lowest end of each of the concave troughs. The motion imparted to the top of this shaking-table is triple, and thereby the separation of the ore is materially facilitated.—*Scientific American.*

BULL, MIDDLETON, AND CO.,
ADVERTISING CONTRACTORS, PRINTERS, STATIONERS, &c.,
ESTABLISHED 1855.

Advertisements inserted in all the London and Country Papers, in the Magazines and Periodicals, at all the Railway Stations throughout the United Kingdom, in the Omnibuses and all Street Stations, Steamboat Piers, &c.,
6, SERLE'S PLACE, LINCOLN'S INN, LONDON, W.C.

TO NEWSPAPER PROPRIETORS, ADVERTISING AGENTS, AND THE TRADE.
BULL, MIDDLETON, AND CO.'S
EXPRESS NEWS AND DESPATCH CARTS.

UP SERVICE.—Leave the office, No. 6, Serle's-place, Lincoln's Inn, W.C., early every morning, calling at the offices of all newspapers, agents, &c., *en route* to the principal railway and steam-boat stations, collecting country parcels of newspapers, books, &c., arriving by early trains, for immediate distribution among the offices of the newspapers, "City correspondents," advertising agents, the trade, advertisers, &c., throughout the metropolis.

All parcels consigned to the care of Bull, Middleton, and Co. are delivered throughout the City in about one hour from the time of arrival by train; thus accomplishing a great and highly important saving of time over the old system of foot messengers.

Mid-day and late trains are also regularly met by Bull, Middleton, and Co.'s expresses, and parcels immediately sent off for distribution. Should a parcel of papers be delayed through the late arrival of the train, all possible speed is secured to ensure the earliest distribution of the same.

DOWN SERVICE.—Leave the principal offices of "City correspondents," newspapers, advertising agents, &c., at intervals throughout the afternoon, commencing about Twelve o'clock, for the convenience of those having important despatches for conveyance by certain trains to the offices of the principal country newspapers, and to whom the punctual dispatch by a responsible person is of consequence. Other special arrangements can be entered into if required.

Certain special services for Evening Journals undertaken.

BULL, MIDDLETON, and Co. are agents by appointment for delivery of the following papers throughout the Metropolis:—"Birmingham Daily Post," Birmingham Journal," "Bristol Daily Post," "Bristol Mercury," "Cambria Daily Leader," "Western Daily Press," &c., &c.

*** With last week's Journal a SUPPEMENTAL SHEET was given, in which is published:—Mechanical Ventilation of Collieries, illustrated with diagrams of the principal ventilators in use on the Continent—On Mining Accidents, and their Prevention—The Chemistry of Coal and Fire-damp—Parkesine—Utilisation of Refuse Slate—Limestones and Marbles—Sodium Amalgam Experiments—Peat as Steam Fuel—Manufacture of Illuminating Gas and Oil—Hints to Emigrants, No. 5, by Charles S. Richardson—Visit to the Quicksilver Mines of Idria—Double-Acting Safety Valve—Puddling and Converting Furnace—Puddling Iron—Improvements in Casting—Absolutely Pure Iron—Improved Excavator—Substitute for Britannia Metal—Improved Dressing Machinery—Improved Copper Smelting Furnace—Petroleum as Steam Fuel—Albertite—Collecting Gases from Blast-Furnaces, illustrated—Utilisation of Fire-Damp—Copper Ore Statistics—Manufacture of Zinc—Nitro-Glycerine, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 16, 1866.

COPPER.	£	s.	d.
Best selected.....per ton	89	0	0
Tough cake and tile „	86	0	0
Sheathing and sheets „	91	0	0
Bolts ..... „	93	0	0
Bottoms..... „	96	0	0
Old (Exchange) .... „	77	0	0
Burra Burra £86 0 0–	88	0	0
Wire.....per lb.	0	0	11¾
Tubes ..... „	0	1	0¼

BRASS.	Per lb.
Sheets .....per lb.	10¼d.– —
Wire ..... „	8¾d.– 9d.
Tubes..... „	11d.– —
Yellow Metal Sheath.p. lb.	7½d.–8½d.
Sheets ..... „	7¾d.–8d.

SPELTER.	Per ton.
Foreign on the spot.....	21 5 0
„ to arrive.....	21 10 0

ZINC.			
In sheets	28	0	0

TIN.			
English blocks	85	0	0
Do., bars (in barrels)	86	0	0
Do., refined.....	88	0	0
Banca	83	0	0
Straits	81	0	0

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 14 0– —
IX Ditto, 1st quality	2 0 0– —
IC Ditto, 2d quality..	1 10 0– —
IX Ditto, 2d quality..	1 16 0– —
IC Coke.....	1 4 6– 1 6 0
IX Ditto	1 10 6– 1 12 0
Canada plates,p.ton..	13 10 0– —
Ditto, at works	12 10 0– —

* At the works, 1s. to 1s. 6d. per box less.

IRON.	Per ton.
Bars Welsh, in London	7 0 0– 7 2 6
Ditto, to arrive	7 0 0– —
Nail rods	7 10 0– 9 5 0
„ Staffd. in London	8 7 6– 8 17 6
Bars ditto	8 7 6–10 0 0
Hoops ditto	9 7 6–10 0 0
Sheets, single.....10	0 0–11 0 0
Pig No. 1, in Wales..	4 5 0– 4 10 0
Refined metal, ditto..	4 0 0– 5 0 0
Bars, common ditto..	6 0 0– 6 10 0
Do. merch. Tyne or Tees	7 10 0– —
Do., railway, in Wales	5 10 0– 6 0 0
Do., Swed. in London.10	7 6–11 0 0
To arrive 11	0 0– —
Pig, No. 1, in Clyde..	2 14 6– 2 19 6
Do. f.o.b. Tyne or Tees	2 9 6– —
Do. Nos. 3,4, f.o.b. do.	2 6 6– 2 7 0
Railway chairs	5 10 0– 5 15 0
„ spikes 11	0 0–12 0 0
Indian Charcoal Pigs, in London p. ton..	7 0 0– 7 10 0

STEEL.	Per ton.
Swed., in kegs(rolled)..14	0 0–14 10 0
„ (hammered)..16	0 0–16 10 0
Ditto, in faggots 16	10 0–17 10 0
English, spring 19	0 0–23 0 0
QUICKSILVER (p. bottle)	6 18 0– 7 0 0

LEAD.	Per ton.
English Pig, com. 20	0 0– —
Ditto, ordinary soft..20	5 0–20 10 0
Ditto (WB) 22	15 0– —
Ditto, sheet.....21	0 0– —
Ditto, red lead 23	10 0–24 0 0
Ditto, white 27	0 0–30 0 0
Ditto, patent shot....23	0 0– —
Spanish.....19	10 0–19 15 0

REMARKS.—The Metal Market has continued in a state of depression during the past week, and there has been no revival whatever; indeed, if anything, there has been a greater want of animation and spirit exhibited. Buyers give out their orders as sparingly as possible; and, although it is understood there are a good many orders on hand, yet from the present appearance of matters generally, and from the unfavourable state of mercantile affairs in India and China, they are afraid to give them out for execution. The uncertainty and difficulty which has arisen in the settlement of some of the companies which suspended during the late commercial panic, and the doubt as to the position in which the shareholders may be placed, is without question one of the main causes which is now affecting our mercantile business, and producing the present very unsatisfactory state of affairs, as it tends to cause a want of confidence which is very prejudicial to business; and until this state of things is altered, and some definite arrangement is come to with regard to the settlement of the companies referred to, we fear no improvement will take place in business, and that we shall still have to record from week to week a continued depression in the metal market. We trust it may be otherwise, but cannot help fearing that we shall not see a much better state of things arising in the metal market during the present year.

COPPER.—During the whole week the market for this metal has been in a most inactive condition, no sales of any consequence having occurred. Prices have undergone no change, but there seem at present to be no buyers at all.

IRON.—In Staffordshire, although trade is very dull, and the workmen on an average only about half employed, yet some of the larger manufacturers, who have an established connection with merchants and extensive home consumers, and whose brands are esteemed, say that they are continuing to receive rather more orders for current consumption. Their sheets, especially the superior qualities, are in good demand, and hoops are also being ordered. Plates, owing to the depression of the shipbuilding trade, are very little in request, and the demand for common bars is also flat. There is not much doing in pig-iron, and the whole trade is flat, and many think a reduction in price and wages must precede any substantial recovery. In Welsh operations are being carried on with an average amount of regularity, and American orders for immediate delivery are being executed with spirit. During the past week a moderate amount of railway iron has been cleared out for America. Trade with British North America promises to be moderately active, and, according to advices received, Russia will be a fair customer during the ensuing spring. At present trade with India is quiet. The home trade continues depressed, in consequence of the inability of the railway companies and large buyers to enter the market to any extent; and it is not expected that any improvement will take place this year. The demand for pigs is very contracted. In Swedish iron very little is doing. In Scotch pig-iron there has been very little fluctuation during the week, varying only about 3d. per ton; the last price quoted is 53s. 6d. cash.

LEAD.—Business to a limited extent only has been transacted, and prices remain the same as formerly quoted.

TIN.—The market for foreign has remained exceedingly quiet during the week, and only very small sales have occurred. Buyers cannot be found to give as much at 81*l.* 10s. for Straits, and the sales which have taken place have been done at 81*l.* cash, which may be considered the quotation.

SPELTER has not continued to improve, and transactions have been very limited. For parcels on the spot the price now quoted is 20*l.* 5s.

TIN-PLATES.—The forward demand has slackened, but makers are tolerably well off for orders for immediate delivery at current quotations. STEEL and QUICKSILVER without change.

The MINING SHARE MARKET has not been by any means active or buoyant since our last, and the dealers have been for the most part engaged in the settlement of the "fortnightly," which, considering the times, was rather heavy. There has been a rise in tin, and copper, we understand, is firmer; and, therefore, we hope soon to see a better and more extended market for shares, for at present operations are confined to one or two mines. Prince of Wales shares have been, as usual, very largely dealt in, at prices varying from 28s. 6d. to 24s. 6d., and leave off 25s. to 27s.; at the quarterly meeting, full particulars of which will be found in another column, the accounts showed a cash balance in hand of 60*l.* 0s. 9d., and a balance against the mine to the present time of 329*l.* 18s. 6d., but to place the finances in a good position, the costs for three months to end of December next were estimated at 750*l.*, and added to the debit balance, making it 1079*l.* 18s. 6d., and a call of 1s. 6d. per share was made. The report states that the 45 east has been driven through a course of ore for 21 fathoms, worth on the average 30*l.* per fathom for the whole distance. The present end has a bar of killas in it, but the agent thinks in a few feet further driving the ore will be in again as rich as ever. In the 45, west of the cross-course, although the end is only 2 feet from it, ore is coming in, worth 1¼ ton per fathom, and improving. It is expected the lode will be cut in the 55 in about six weeks, and the north lode in about a month. It will be most satisfactory to the shareholders also to learn that the Chairman of Devon Great Consols has purchased a very large interest in Prince of Wales, after having the mine examined by his own agents, and that he has joined the committee of management.

Wheal Buller, 19 to 20; the 80, west of Stevens's shaft, has improved to 25*l.* per fm., the 80 east is worth 40*l.* per fathom. Wheal Crebor, 8s. to 10s.; at the meeting a call of 1s. 6d. per share was made. The accounts showed a balance against the company of 182*l.* 11s. 10d. At North Roskear meeting a call of 16s. per share was made. The accounts showed a balance of 570*l.* 14s. 3d. against the mine, charging September cost and crediting ores sold November. The agents report that although the present state of the mine is a gloomy one, still there are chances of making discoveries at some or other of the points being explored. Grambler and St. Aubyn, 4 to 5; at the meeting the accounts showed 602*l.* 9s. 8d. against the company, and a call of 1*l.* per share was made. There are one or two very favourable points in the mine, and with a better price for tin and copper, the agent states it would be in a very fair position. Carn Camborne, 23s. to 25s.; Chiverton Moor, 4 to 4¼; Clifford Amalgamated, 6¾ to 7¼; Cook's Kitchen, 7 to 7⅛; East Basset, 21 to 23; East Caradon, 5¼ to 5¾; East Lovell, 11 to 11½; East Carn Brea, 2⅞ to 2¾; East Russell, 3 to 3⅛; East Wheal Grenville, 1⅞ to 2⅛, and in request. Great Laxey, 17⅛ to 18⅛; Great North Downs, 2⅞ to 3⅛; Great Retallack, 8s. to 10s.; Great South Tolgus, 7s. 6d. to 12s. 6d. Chontales have been flat, 2½ to 2⅝; the advices by the mail state that the commissioners had arrived in good health, and had organised a satisfactory system of management at the mines. They also write encouragingly of the speedy progress of the works, and the general prospects appear to warrant the expectation of good results. The lode has been cut at Consuelo, promising in appearance, but not rich at the point of intersection. Although no gold has been sent by this mail, 300 ounces had been raised at the mines since last remittance. Great Wheal Vor, 17 to 17⅛; Marke Valley, 4 to 4¼; North Crofty, 2 to 2⅛; Carnarvonshire Consols, 4¼ to 4⅛; North Treskerby, 3⅛ to 3¼; Providence Mines, 21 to 22; South Condurrow, 9s. 11s.; South Darren, 1⅜ to 1⅝; South Frances, 19 to 20; Tincroft, 9 to 9¼; West Caradon, 15 to 16; West Chiverton, 58 to 60; West Seton, 120 to 130. Wheal Chiverton have been largely dealt in up to 8¼, and leave off 7 to 7⅛. Wheal Grenville have advanced 22s. 6d., 25s., and in demand. Wheal Rose, 5 to 6; Wheal Seton, 140 to 145.

On the Stock Exchange there has been a fair average amount of business transacted during the week, and prices generally are firmer. St. John del Rey, 51 to 52; Don Pedro, ¼ dis. to par; Anglo-Brazilian, ¼ dis. to par; Port Phillip shares have been in especial request, and a very large business has been done, the reports from the mines being exceedingly satisfactory, closing 1 to 1⅛; English and Australian Copper, ⅞ to 1⅛; Capula Silver shares easier, 1⅛ to 1⅜; United Mexican shares firmer, at 1⅞ to 2⅛; Cobre, 2 to 3; Chontales, ⅜ to ½ dis.; Frontino and Bolivia, ⅛ to ¼; Pestarena, ⅛ dis. to ⅛ prem.; Cape Copper, 1⅜ to 2 prem.; Clifford Amalgamated, 6¼ to 7; Chiverton, 6¾ to 7⅛; Drake Walls, ¼ to ½; Devon Consols, 430 to 440; East Caradon, 5¼ to 6; East Russell, 3 to 3⅛; Great Vor, 17 to 18; Herodsfoot, 30 to 31; Margaret, 3 to 4; New Seton, 35 to 45; Providence, 23 to 25; Seton, 142½ to 147½; Tincroft, 9 to 9¼; West Seton, 130 to 140. West Chiverton, 59 to 61; the meeting will be held this day at the mines; the report to be presented is of a very highly favourable character. Westminster (Limited), 5 to 5¼; rapid progress is being made in the execution of the works, and the prospects of the mines are very good.

IRISH MINE SHARE MARKET.—We have for some weeks past expressed our opinion that a genuine revival of activity of business in new undertakings, or even in shares of the more favoured old ones, will not take place before January or February next, therefore our readers will not be surprised that, notwithstanding a positive superabundance of capital, obtainable at almost the lowest possible rate of interest for short and perfectly safe accommodation, there is scarcely anything doing in mining, or any other shares. Under such circumstances it is very assuring for future improvement in transactions and prices that the latter are supported so well, as will be seen from the following quotations:—Wicklow Coppers, which stood last week at 22*l.* 17s. 6d. for cash, and 23*l.* for account (22*l.* 10s. paid), have last been done at 22*l.* 17s. 6d. for account. Mining Company for Ireland shares (7*l.* paid) realised 18*l.* 15s., being a fall only of 5s. per share. General Mining Company for Ireland receded from 3*l.* 5s. and 3*l.* 7s. 6d. to 3*l.* 5s. for cash and account. Connorrees further advanced from 13s. 6d. to 14s.; and Carysforts were also dealt in at the low figure of 3s. per share, which, however, suffices to indicate that there is yet hope entertained of the mine ultimately proving valuable. Killaloe Slate Quarry shares were not enquired for.

[We are compelled to postpone until next week our correspondent's remarks respecting the county Cork "Old Red Sandstone" theory.]

The HOT-AIR ENGINE COMPANY, with a capital of 15,000*l.*, in shares of 10*l.* each, has issued its prospectus. The object of the company is to purchase the patents of the hot-air engine recently described in the *Mining Journal*. The merits and economy of the engine are pointed out in an advertisment in another column. A 1-horse power hot-air engine, of the kind constructed by the company, has been in practical use in London for nine months, driving two lathes, a planing-machine, and a small circular saw, and it has been found that the cost of working, including oil, &c., amounts to less than 5s. per week, and there is neither trouble nor danger attending it—a boy proving competent to take the entire charge of it.

At East Pool Mine meeting, on Nov. 12, the accounts showed a credit balance of 382*l.* 1s. 1d. The profit on the workings for Aug. and Sept. was 335*l.* 14s. 3d. A dividend of 320*l.* (2*l.* 10s. per share) was declared. Extract from the minutes of the committee meeting held Nov. 3:—"The committe, taking into mature consideration the continued low prices of both copper and tin, unanimously resolved, at the pay and setting held on the 3d inst., to suspend certain bargains which would leave a small profit only in the working, including a reduction of hands in the tribute department at several points of operation, whereby a very considerable monthly reduction of cost will ensue; but these reductions the adventurers are desired to consider as purely expedient, arising from the cause first mentioned, and not from any diminution in the prospects of the mine, and will be obviated by a resumption of labour the moment the metal market shall improve. For the present, also, the manager and agents have consented to a reduction of their salaries."

At Par Consols Mine meeting, on Nov. 8, the accounts showed a debit balance of 1669*l.* 1s. 9d. A call of 5s. per share was made. Capts. Puckey and Hosking say—"If the prices of tin and copper had continued similar to what they were two or three years since the mine would have still maintained a good position. After a long depression, we are hopeful as to the future."

At South Frances Mine meeting, the accounts showed a debit balance of 158*l.*, and a loss on the two months' working of 129*l.* The mine is, on the whole, looking better, the ends being worth 70*l.* per fm. The report generally is more favourable than for some time past. The credits at the next account will be in excess of the credits that day by 400*l.* They have about 130 hands employed underground, and 30 at surface. The cost of the agency is about 29*l.* per month, including 12*l.* 12s. to the manager.

At New Pembroke Mine meeting, on Nov. 6, the accounts showed a debit balance of 301*l.* 10s. 5d. A call of 1s. 6d. per share was made. Capts. F. and J. Puckey say—"We have put in the new boiler, which is almost ready to work, and are making preparations to commence sinking the engine-shaft below the 60 fm. level, to prove down the lode at a deeper level, and which will be urged on with all possible dispatch. During the past four months we have sold upwards of 11 tons of black tin, which is an increase of 3 tons from the previous four months; and from our present prospects we can return fully that quantity in the next four months. The prospects of the mine were never so encouraging as at present. The lode improves as we go deeper, and the ground in the cross-cuts is of the most congenial character for mineral."

At North Roskear Mine meeting, on Tuesday, the accounts for Aug. and Sept. showed a debit balance of 570*l.* 14s. 3d. The relinquishment of two shares was accepted, and a call of 16s. per 698ths share was made. Capt. Joseph Vivian and Son and R. Angove reported that, although the present state of the mine is a gloomy one, there are chances of making discoveries at some or other of the points at which they are exploring, which may bring the mine again into a profitable state. They will keep the expenditure at the lowest, whilst making trial of the most promising parts of the mine.

At Caradon Consols Mine meeting, on Thursday (Mr. Buckland in the chair), the accounts showed a debit balance of 130*l.* A call of 10s. per share was made. Details in another column.

At West Wheal Vor meeting, on Monday (Mr. W. Grundy in the chair), the accounts showed a balance of liabilities over assets of 259*l.* A resolution was passed to the effect that, owing to the large amount of the arrears of call, and the great difficulty in getting them paid, the works be abandoned, and the mine, machinery, and lease be sold by public auction, in one lot, and the proceeds, together with any other payments, be applied to the reduction of the debts. It was also agreed that a petition be presented to the Vice-Warden for winding-up the company. A letter was read from Mr. Curtis (mineral agent to Mr. Rogers), to the effect that he inspected the mine on Oct. 31, when he found

there were two lodes of great promise cut at Guitterriez's shaft—this part of the mine adjoins the richest tin mine ever discovered in Cornwall (Great Wheal Vor), and he strongly recommended trying the two lodes, to prove if they are or not the two Wheal Metal lodes, which can be proved for a small outlay, as the engine, flat-rods, and pitwork are in first-class working order.

At Craddock Moor Mine meeting, on Nov. 8, the accounts for May and June showed a debit balance of 270*l.* 4s. 10d. A call of 7s. per share was made. Capts. Henry Taylor, John Taylor, and Henry Phillips say—"We have attached the rods to the new engine from this shaft, and shall now be enabled to work this part of the mine more expeditiously, and as the lode appears to be improving in depth we think the time is not far distant when the mine will become more than self-supporting. The engine works well, and will effect a saving in coals. We expect to sell about 165 tons of copper ore for the next two months.

At Treweatha Mine meeting, on Nov. 10, the accounts showed a debit balance of 2498*l.* 12s. 2d. A call of 10s. per share was made. Mr. R. W. Johnson was elected on the committee of management, in the room of Mr. E. F. Ross, resigned. Capts. Foote and Scoble say—"The engine and machinery are all in good order, and working well. We have cleaned off a pile of stuff after Hunt's separator machine taken out of the old burrows, and which, we are pleased to say, will pay well for working over. Every effort will be made to raise all the ore possible, and at the same time to reduce cost to the lowest scale consistent with the proper working of the mine."

At Bryn Gwiog Mine meeting, on Nov. 8, the account for the three months ending September showed a credit balance of 477*l.* 19s. 1d. Captains Michell and Harper reported that they have 120 hands employed underground and at surface, and that they calculate their raisings for the current quarter to be about equal to the last.

At Wheal Reeth Mine meeting, on Monday, the accounts showed a debit balance of 1339*l.* 19s. 3d., to meet which a call of 7*l.* 14s. 11d. per share was made. Notice is to be given to the lords of the sett of the intention of the adventurers to abandon the mine, and surrender the setts, and that the materials be offered to the lords, in pursuance of the covenants contained in the setts, and, in the event of the lords declining to take the materials, that the setts, mine, and materials, be offered for sale, and that the committee be authorised to take steps for the speedy winding-up of the affairs of the mine. The report states that there are 82 men working 30 pitches, at an average tribute of 13s. 4d. in 1*l.*

At Carn Brea Mines meeting, on Tuesday (Mr. Louis Vigurs in the chair), the accounts for July and August showed a loss of 16*l.* 1s. 8d. on the two months' working, and which, added to the balance of 2832*l.* 10s. standing over from last account, makes 2848*l.* 11s. 8d. to the debit of adventurers. A call of 2*l.* per share was made. A very lengthy report was read from Captains Daw, James, Miners, and Hosking: they conclude—"The working cost for the past two months is about 4400*l.*, against which we have sold 73 tons 16 cwts. of black tin, or a little over 8 tons per week, and also 1!20*l.* worth of copper ore. We calculate the returns of tin for the next two months will be at about 8 tons per week, and also to sell from 1000*l.* to 1100*l.* worth of copper ore."

At the Mine Shares Investment Company meeting the accounts for the six months, to Sept. 30, show that there has been paid-up on capital account 62,773*l.*; the nett revenue (the dividend and interest received and profit on share transactions being 2184*l.* 4s. 8d., and the office expenses 242*l.* 10s. 1d.) was 1941*l.* 14s. 7d. There is a suspence account, comprising profit on shares sold of 67*l.* 19s. 4d.; and outstanding accounts, 1528*l.* 10s. 7d.—66,311*l.* 4s. 6d. The company has invested in mining shares 60,946*l.* 2s. 6d., and advanced on mining shares 3500*l.*; the preliminary expenses, office furniture, and outstanding accounts were 189*l.* 6s. 11d.: leaving a credit balance of 1675*l.* 15s. 1d. The subjoined is the report of the directors:—"The directors have to report that the total number of shares issued to September 30 is 9047—of these 4240 have been paid in full, producing, at 10*l.* per share, 42,400*l.*; upon 1195 shares 5*l.* per share have been paid, producing 5975*l.*; and upon the remaining 3612, 4*l.* per share (less 50*l.* per share), producing 14,398*l.*: making altogether 62,773*l.*, which constituted the paid-up capital of the company on September 30 last. The amount invested in mining shares is 60,946*l.* 2s. 6d., and in loans on the security of mining shares 3500*l.* The income of the half-year from dividends on mining shares, interest on loans, and profit on share transactions is 2184*l.* 4s. 8d., which, after deducting all charges of management, would provide for the payment of a dividend at the rate of 6 per cent. per annum from March 31, or from the date of subsequent subscriptions, to Sept. 30, on all amounts received from shareholders. This result is far less favourable than in the three preceding half-years, or than the managers and directors anticipated at the time when the company was formed; but so many causes have contributed to the depression of the prices of all kinds of metals and mineral produce that the profits from even the best mines have been very largely reduced, and from some no profit whatever has lately been realised. Having regard to this unlooked for and unprecedented state of things, the directors have deemed it advisable to charge the sum of 650*l.* against the last half-year's revenue, placing it to a fund to recoup the loss incurred on the shares in the two mines which have been suspended, and will probably not be worked again. They do not, therefore, feel justified in declaring a larger dividend than at the rate of 4 per cent. per annum upon the present occasion. The metal markets have lately improved, and mining property generally is again rising in value, and it may fairly be expected that, as the trade of the country generally improves, and especially that with India and China, which of late has been most particularly depressed, the dividends from the shares held by this company will be largely increased."

At the Gonnesa Mining Company meeting, on Wednesday, the accounts showed a credit balance of 8506*l.* 19s. 1d., and a profit for the year ending June 30 of 6856*l.* 10s. 8d. The details of the meeting will be given in next week's Journal, pressure on our space preventing its insertion to-day.

At East Del Rey meeting, on Tuesday (Mr. C. Morris in the chair), an adjournment was agreed upon until after the receipt of the special report upon the mines. Details in another column.

At the Washoe Gold and Silver Mining Company (special) meeting, on Wednesday, the special resolutions passed on October 31 were confirmed. They were to the effect that the capital of the company be increased by 75,000*l.*, including the sum of 50,000*l.* authorised by special resolutions passed in June, and confirmed in July, 1866, that such capital be divided into 5000 shares, of 5*l.* each, that so many of such shares as may be necessary be issued to such holders of loan notes as may be required for any discharge of an equivalent amount of principal and interest, secured by loan notes held by them, and that the remainder of the shares (if any) be reserved in hand for any contingency.

The Bank of England return for the week ending on Wednesday evening showed on important increase in the reserve of considerably more than 500,000*l.* In the ISSUE DEPARTMENT there is shown an increase in the "notes issued" of 147,475*l.*, represented by a corresponding increase in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "public deposits" of 770,058*l.*, and an increase in the "rest" of 15,456*l.*—785,494*l.*, a decrease in the "other deposits" of 463,064*l.*, and a decrease in the "seven day and other bills" of 49,523*l.*—512,587*l.*; leaving an increase of liabilities of 272,907*l.* On the asset side there is shown a decrease in the "other securities" of 269,158*l.*, and an increase in the "Government securities" of 457*l.*—264,579*l.*, which, added to the increase of 272,907*l.* on the other side, gives an increase in the total reserve of notes and coin of 537,486*l.*

On the Stock Exchange a moderate amount of business has been transacted in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Chiverton, 7¾; East Basset, 23; Great Laxey, 18, 17¾, 18⅛; West Chiverton, 60; Great Wheal Vor, 17½, 17, 17⅜, 17; Clifford, 7; East Caradon, 6; East Carn Brea, 2⅜.—In Colonial Mining Shares the prices were:—General, 20¼, 21; Port Phillip, 1, ⅞, 1, 1⅛; Yudanamutana, 1⅛, 1, 1¼, 1, 1⅛, 1¼.—In Foreign Mining Shares the prices were:—St. John del Rey, 50, 51, 50⅞, 51, 51¼; United Mexican, 1⅛; Washoe, 2; Frontino and Bolivia, ¼.

COAL MARKET.—The fresh arrivals this week numbered 102 ships. For household coal the demand has been quite equal to the supply, and last week's prices are fully supported, with an occasional advance of 3d. on second-class sorts. Hartley's were a short supply, and advanced 3d. per ton. Hetton Wallsend, 22s.; Original Hartlepool Wallsends, 21s. 6d.; East Hartlepool Wallsend, 21s. 3d.; Braddyll's Hetton Wallsend, 20s. 9d.; Hetton Lyon's Wallsend, 19s. 9d.; West Hartley, 18s. Unsold four cargoes: 55 ships at sea.

THE COPPER TRADE.—Mr. Pitcairn-Campbell, Liverpool, reports—The same absence of demand continues for English copper, and the market altogether is rather weaker, partaking of the general depression which prevails. Another quantity of 700 tons carbonate ore has been taken for shipment to America, and that, as well as the purchase mentioned in our last, will be sent off immediately. Quotations are 14s. 6d. for ores and regulus, 74*l.* to 75*l.* for bars, and 15s. 9d. and 16s. for Barilla. Sales since our last have been—

Nov. 2.—	38 tons Urmenita ingots, ex Hercules, Swansea..	£82	0	0	per ton.
Nov. 3.—	66 tons bars, to arrive, ex Mohican	75	10	0	per ton.
Nov. 3.—	400 tons Moonta ore, at Swansea	0	14	9	per unit.
Nov. 5.—	100 tons Cousina ingots, ex Egbert	82	0	0	per ton.
Nov. 5.—	315 tons regulus, to arrive, ex Prince Alfred	0	15	0	per unit.
Nov. 6.—	50 tons Urmenita bars, ex Hercules, at Swansea.	74	15	0	per ton.
Nov. 7.—	50 tons Urmenita bars, ex Hercules, at Swansea.	74	15	0	per ton.
Nov. 7.—	300 tons Barilla, ex Victorine, at Havre, equal to	0	16	0	per unit.
Nov. 8.—	70 tons bars, to arrive here, ex Kamchamcha IV.	0	16	0	per unit.
Nov. 8.—	15 tons Urmeneta bars, ex Hercules, at Swansea.	74	15	0	per ton.
Nov. 8.—	184 tons Urmeneta bars, ex Hercules, at Swansea.	74	17	6	per ton.
Nov. 8.—	50 tons Cousina ingots, ex Egbert	82	0	0	per ton.
Nov. 9.—	20 tons bars, ex Santa Rosa	75	0	0	per ton.
Nov. 9.—	150 tons bars, ex Prince Alfred	75	0	0	per ton.
Nov. 10.—	50 tons bars, second hand, ex Santa Rosa	74	5	0	per ton.
Nov. 13.—	361 tons ore, ex St. Bernard, at Swansea	0	14	6	per unit.
Nov. 13.—	315 tons ore, ex Black Watch, at Swansea	0	14	6	per unit.

Stocks of copper produce (Chilian and Bolivian) in first and second hands, likely to be available, are as follows:—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	2215	1935	2721	849	248
Swansea	9577	6256	367	—	64

Arrivals from the West Coast, S.A., during the past fortnight—

	Ores.	Regulus.	Bars.	Ingots.
Santa Rosa, San Antonio	—	—	157	—
Prince Alfred, Coquimbo	180	315	150	—
Chanarcillo, Valparaiso	—	—	35	—
Kappa	—	—	125	100
At Swansea—Beatrice, Carizal	70	614	—	—
Golondina, Chanaral	—	717	—	—
Swansea, Duendes	500	—	25	—
Rosetta, Caldera	500	—	—	—

Messrs. Vivian and Younger (November 16) write—Business in copper continues inanimate, and is still confined to the most ordinary wants of consumers and others, who are compelled to come into the market from time to time for small supplies; and even these orders are far below the average. The advices by the mail from Chili, received on the 13th instant, show charters for about 1500 tons of copper in ore, regulus, and bar. This is still below an average shipment; but, on the other hand, the general trade in the article is so bad that even the late falling off in export from Chili will result in an accumulation of stocks here, unless we see some revival in the demand soon. A further sale has been made of ores, &c., for America; beyond this no transactions of interest have taken place during the week.

THE OWLLWYN IRON AND COAL COMPANY.—A petition, presented by the secretary, to wind-up this company was heard before Lord Romilly on Saturday. The petitioner was a creditor for arrears of salary and money paid on account of the company, and he had obtained judgment. The company, for whom Mr. Lindley appeared, asked that the petition might stand over on the ground that a new company was being formed to purchase the old company's works and property, and that if an order to wind-up was made the contemplated arrangement could not be carried out. The Master of the Rolls considered the petitioner entitled to an order, but suspended action upon it in order that a transfer to the new company might, if possible, be effected.

LONDON AND SHEFFIELD NICKEL-SILVER COMPANY (Limited).—A petition for winding-up this company by the Court of Chancery has been presented to the Master of the Rolls by Mr. Alfred Tooth, 12, London-street.

The Master of the Rolls has appointed Mr. George Scott, of Bond-court, Walbrook, official liquidator for winding-up the Freehold Land and Brick Making Company (Limited).

MR. GEORGE HENWOOD, M.E.—There appears too much reason to fear that our respected correspondent, Mr. George Henwood, is among the sufferers by the calamity which befel the steamer *Ceres*, wrecked on her voyage to Dublin. Mr. Henwood had visited the South and Wheal Trevenna Mines, in company with Mr. Nevill, the secretary, and had promised to send full reports for this week's Journal; but, from the enquiries made, we are under the painful necessity of supposing that he was one of the passengers on that fatal passage.

COLLIERIES AND COLLIERS.—A series of papers bearing this title have recently appeared in the *Mining Journal* over the signature of "H.;" and as the fact of their publication having extended over many weeks may have prevented the arguments adduced from being appreciated to the extent they deserved, the author, Mr. W. B. Higgins, has carefully revised the whole series which is now printed in the convenient form of a pamphlet, entitled "Collieries and Colliers; or how to determine the Quantity of Coal in the British Coal Fields," which will be forwarded from the *Mining Journal* Office, on receipt of 13 stamps.

LEAD AND IRON.—A GENTLEMAN in AYRSHIRE, SCOTLAND, has SECURED a LEASE for 21 years of all MINERALS (except Gold and Silver) on a LARGE EXTENT of LAND in that county.

From searches that have already been made, Lead has been discovered in at least five different places, and at several miles distance from each other. It appears to be abundant.

Iron of the hematite class has also been found, and from all appearances is in large quantities. A sample of the Lead and Iron will be seen at the office of the MINING JOURNAL.

As it will be inconvenient for the lessee to work these minerals, he is desirous to SUBLET or SELL HIS RIGHT TO THE LEASE, as may be agreed upon.

Any further information will be given by ALEXANDER BLANE, Esq., Alton Albany, Barr-by-Girvan, Ayrshire, Scotland, who will cause parties to be shown the places where the minerals are.

LEAD SETT WANTED.—Must be in a good situation, and be well reported upon. No fancy price will be paid, and no notice will be taken of any communication that does not contain full particulars.—Address, "W. W. W.," Deacon's News Rooms, Leadenhall-street,

WANTED, a PARTNER in a STEAM COAL COLLIERY, in full work, connected with the narrow-gauge railway system, and close to two good shipping ports.—For particulars, apply to D. JONES, Esq., C.E., Swansea.

WANTED, A GOOD IRON ORE PROPERTY.—The ADVERTISER is PREPARED to TAKE a LEASE of a thoroughly GENUINE SETT, and to establish a private Joint-Stock Company to develope the same. Immediate applications, with full particulars, will only be attended to.—Address "X. Y.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

A GENTLEMAN having an extensive connection with merchants, manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, upon commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small-street, Bristol.

THE TRUSTEES of a deceased Gentleman WISH to DISPOSE of his INTEREST in a valuable COAL PROPERTY near MOLD, adjoining Collieries at which the Coal and Cannel seams have been proved and worked.—For particulars, apply to Mr. T. L. COTTINGHAM, Mining Engineer, Mold, Flintshire.

TO CAPITALISTS.—FOR SALE, BY PRIVATE TREATY, A very valuable BLACKBAND IRON ORE MINE; TWO current going STEAM COAL COLLIERIES, £10,000 and £9000; a BITUMINOUS COLLIERY, £6000; the active or sleeping FOURTH SHARE in a BITUMINOUS COLLIERY. £4000.—Apply to Mr. ELIAS J. BEOR, Mining Engineer, Swansea.

OKEHAMPTON MINING COMPANY (LIMITED).—WANTED, an OFFER for EIGHTY SHARES (£1 5s. paid on each) in the above company; also TWENTY SHARES in the COFFEE, COCOA, COTTON, AND GENERAL PRODUCE FREEHOLD ESTATES COMPANY OF VENEZUELA (LIMITED) (£6 paid on each share).—Apply to WM. TAYLOR, Esq., Hexham, Northumberland.

LLANFAIR GREEN AND BLUE SLATE QUARRY.—Manager, T. HARVEY, Esq.—TO BE SOLD, FIFTY SHARES at a very considerable discount.—Address, "N. K. H.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

IMPORTANT TO IRONMASTERS.—FOR SALE, a first-class IRON MINE, where any quantity of ore may be raised (without the use of water or steam machinery), and which is now open. The above being near a good shipping port, a good profit can be made monthly. The present owners will sell the ore to any ironmasters, or the mine. The above offers an excellent investment to capitalists and others, here being no further outlay required, but to commence work, and any quantity of ore may be raised at once.

Any further information can be obtained by applying to "C. B.," Post Office, Bodmin.

TO COALOWNERS AND OTHERS.—TO BE LET OR SOLD, with immediate possession, the ROYALTY of TWENTY ACRES of the BEST COAL, 7½ feet band, within three miles of the seaport town of MARYPORT, CUMBERLAND.—Apply, by letter only, to P. LUMB, Esq., 42, Parliament-street, Westminster, S.W.

FOR IMMEDIATE SALE, about FIFTY TONS of best SHEET IRON, various sizes, No. 7 to 28 W.G., in good condition, at £7 15s. per ton for singles, nett cash on delivery here. Also FIFTY TONS wrought-iron SHAFTING, 6 in. to 8 in. round; and ONE HUNDRED TONS KENTLEDGE IRON. The above to be sold cheap.—Apply to JOHN ROBERTS, Iron Merchant and Metal Broker, 55, Tower-buildings East, Liverpool.

FOR SALE,—A SECOND-HAND PORTABLE OR TRACTION STEAM ENGINE, of 7-horse power; has reversing gear; with or without pit winding drum.—Apply to BARROWS and CARMICHAEL, Portable Engine Works, Banbury, Oxon.

STEAM ENGINES FOR SALE:—60-inch PUMPING ENGINE, equal beam, 10 ft. stroke, with TWO 10-ton BOILERS; 36-in. CYLINDER SINGLE-ACTING ROTARY ENGINE, 14 ton fly-wheel, with 9 ton BOILER; 18-inch CYLINDER DOUBLE-ACTING ROTARY ENGINE, with drawing gear, whim cage, and 7-ton BOILER, the whole in good condition, to be seen at Kelly Bray Mine, Callington, Cornwall.—For further particulars and price, apply to Mr. EDWARD KING, 22A, Austinfriars, London.

TRUCKS TO LET.—FORTY 7-ton NARROW GAUGE TRUCKS TO BE LET, with immediate possession. For further particulars, apply to HENRY BAKER, Esq., Secretary to the Western Wagon Company (Limited).—Bridgewater, Nov. 13, 1866.

LEVANT UNITED MINES.—WANTED TO PURCHASE, LEVANT UNITED MINE SHARES, at ¼ premium. Apply to Messrs. CARNE and CARTHEW, 12, North-buildings, Broad-street Terminus, where the shareholders can see the report of the recent inspection, and the splendid stones of ore taken from the lode in the adit level.

Messrs. CARNE and CARTHEW can offer to investors inducements which will realise rapidly 200 or 300 per cent. on present prices.

WEST MARIA AND FORTESCUE CONSOLS MINE.—SHAREHOLDERS and OTHERS INTERESTED in the above mine can be FURNISHED with FULL PARTICULARS as to its PRESENT POSITION and FUTURE PROSPECTS by applying to the undersigned, who has had a special inspection of the mine made by one of the most experienced and respectable mining agents in Cornwall. Copies of his report can be obtained, at 2s. 6d. each, of Mr. HENRY BLANCHARD, Sharebroker and Accountant, Teignmouth, Devon. Bankers: Watts and Co., Teignmouth Bank.

NERBUDDA COAL AND IRON COMPANY (LIMITED).—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the company will be HELD at the London Tavern, Bishopsgate-street, on MONDAY, the 26th day of November, at Two o'clock P.M. precisely, for the purpose of enabling the directors to lay before the proprietors the bases of a contract with the Great Indian Peninsula Railway Company.

By order of the Board, HERBERT HEATH, Sec.

Office, 9, Sise-lane, Bucklersbury, E.C.

THE LUSITANIAN MINING COMPANY (LIMITED).—Notice is hereby given, that the directors have this day made a CALL of FIVE SHILLINGS PER SHARE, payable on or before the 22d day of December next. By order of the Board, W. G. WILLIAMS, Sec.

5, Queen-street-place, E.C., Nov. 16, 1866.

BRECONSHIRE, MID-WALES.—SLATE QUARRIES TO LET, near NEWBRIDGE-ON-WYE.—Apply to Mr. PRATT, Crickhowell.

TO MINING AGENTS AND DIRECTORS OF LEAD MINING COMPANIES.

MESSRS. WESTON AND COLLINGBORN, of No. 18, PETER STREET, BRISTOL, having fitted up an establishment at SWINFORD, near BITTON, BRISTOL, for the SMELTING and REFINING of SILVER-LEAD and the other qualities of LEAD ORES, are now prepared to PURCHASE by TENDER, or otherwise, LEAD ORES in any quantities that may be offered to them.—Swinford, near Bitton, Gloucestershire, Oct. 5, 1866.

SHAREHOLDERS IN PUBLIC COMPANIES desirous of avoiding calls and further responsibility will find purchasers on applying to Messrs. BARRETT AND CO., 78, LOMBARD STREET, CITY, and No. 20, SPRING GARDENS, CHARING CROSS. Stocks, shares, mining, and other miscellaneous securities bought and sold. Investment Review on application. Cash advances made.

MESSRS. R. C. CLIFTON AND CO., SHAREBROKERS, ALDINE CHAMBERS, PRINCESS STREET, MANCHESTER.
Mines inspected, and reports furnished. The best practical advice given to capitalists as to investments in mining,
Bankers: National Provincial Bank, Manchester.

ROBERT LIBBY AND SON, MINE AND SHAREDEALERS, CAMBORNE, CORNWALL.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.
Mining, Railway, and other Shares bought, sold, or exchanged. Shares for sale in mines and quarries that will pay 15 to 20 per cent. per annum.
Offices, 5, Finsbury-street, London, E.C.

WILLIAMS'S PERRAN FOUNDRY COMPANY, PERRANARWORTHAL, CORNWALL.
MANUFACTURERS of STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
London Agent.—Mr. EDWARD COOKE, 2, Crown Chambers, Threadneedle-street.

MESSRS. J. H. GREENER AND CO. have always on their List important BUSINESSES FOR SALE, and others for PART DISPOSAL, in Shares or Partnerships, as well as WORKS FOR LEASE, and MONEY TO INVEST.
Parties desirous of disposing of such works as are mentioned below are invited to send particulars; and those wishing to invest will find this an advantageous medium for ascertaining the commercial value of the concerns which Messrs. GREENER and Co. negotiate.
The classes of property to which they chiefly devote their attention are—
COAL AND IRON MINES,
IRON FOUNDRIES,
ENGINEERING WORKS,
SHIPBUILDING YARDS,
BREWERIES AND DISTILLERIES,
And large MANUFACTURING WORKS.
For CAPITALISTS and others, wishing to invest from £500 and upwards, Messrs. J. H. GREENER and Co. keep a Register of all Manufacturing Patents, which they consider likely to be remunerative, and they can advise parties interested in such.
Reports and Valuations made in connection with the business. Particulars on application.
OFFICES,—5, JOHN STREET, ADELPHI, LONDON, W.C.

TO INVENTORS.—THE LONDON PATENT AGENCY, No. 21, COCKSPUR STREET, CHARING CROSS, LONDON, PROCURES PATENTS for INVENTIONS at fixed and moderate charges.
A HANDBOOK GRATIS.
R. MARSDEN LATHAM, Manager.

BRITISH, COLONIAL, AND FOREIGN PATENTS, REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.
MR. MICHAEL HENRY,
Memb. Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac," and the "Defence of the Present Patent Law."
PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.
Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised. Searches conducted. Abstracts, Cases, and Opinions drawn.
Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. HENRY has had especial experience in technical French, and in French Manufacturing and Commercial Matters.
Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

CHONTALES GOLD MINING COMPANY.—A CIRCULAR containing particulars relative to this company's mines, and explaining the position of the different classes of shares, can be obtained on application at the office of Mr. J. H. MURCHISON, No. 8, Austinfriars, London.

NEW WORK BY Mr. W. FAIRBAIRN, C.E.
On the 27th inst., in crown 8vo., with plates and woodcuts,
USEFUL INFORMATION FOR ENGINEERS, THIRD SERIES, as comprised in a Course of Lectures on the Applied Sciences, and on other kindred subjects; together with Treatises on the Comparative Merits of the Paris and London International Exhibitions; on Roofs; on the Atlantic Cable; and on the Effect of Impact on Girders.
By WILLIAM FAIRBAIRN, C.E., LL.D., F.R.S., &c.
London: Longmans, Green, and Co., Paternoster-row.

Second Edition, crown 8vo., limp cloth, 1s.
BENEFIT BUILDING SOCIETIES (THE LAW RELATING TO), comprising the Statutes appertaining thereto, important judicial decisions thereon, and practical comments.
By CHARLES EGAN, Esq., Barrister-at-Law.
London: William Tegg, Pancras-lane, Cheapside.

Now ready, in tuck, gilt edges, price 3s. 6d., by post 3s. 8d. (44 stamps),
GUTCH'S LITERARY AND SCIENTIFIC REGISTER, ALMANAC, AND DIARY FOR 1867.
"Among readers and writers there are few, whatever be the extent of their learning or the tenacity of their memory, who might not find it for their advantage to have such a prompter always at hand."—*Daily Telegraph.*
London: W. Stevens, 421, Strand.

NOTICE OF REMOVAL.

MESSRS. TREDINNICK AND CO DEALERS IN STOCKS AND SHARES.

MR. RICHARD TREDINNICK, MINING ENGINEER AND CONTRACTOR.

MR. THOMAS TREDINNICK, SCRIVENER.

OFFICES,—ST. MICHAEL'S HOUSE, CORNHILL, LONDON.
The business hitherto conducted at 78, Lombard-street is transferred to the above address.
Stocks, Shares in Banks, Railways, Canals, and Insurance Companies dealt in, and Money Advanced upon all sound Securities. Principals alone treated with.

LEAD ORES.

Date.	Mines.	Tons.	Amount.	Purchasers.
Nov. 7	Gronant	7	£13 5 0	A Eyton.
9	Great Laxey	100	22 10 6	Walker, Parker, & Co.
13	Isle of Man Mining Co.	100	24 14 6	—
14	Central Mines	9½	12 0 0	John Hughes.
—	ditto	1⅜	6 0 0	ditto

BLENDE.

Date.	Mines.	Tons.	Amount.	Purchasers.
Nov. 7	Gronant	50	£ 4 14 0	Vivian and Son.
9	Great Laxey	200	3 17 0	Kenrick and Son.
—	ditto	200	3 17 0	Attwood's Executors.

BLACK TIN.

Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
Nov. 9	Leeds & St. Aubyn	10 9 3 12	£46 15 0	£ 490 10 6	Chyandour.

COPPER ORES.

Sold by J. Pitcairn-Campbell and Co. (Nov. 12), at Liverpool:—

	Tons.	Price p. ton.	Purchasers.
Lot 1—(ex Spartan)	38	£6 10 6	James Keys and Son.
Lot 2—(ex Missina), F 39 casks..	12	8 2 6	ditto
Lot 3—(ex ditto), G 93 casks	29	8 12 6	ditto
Lot 4—(ex ditto), S 5 casks	2	8 1 0	C. Lambert.

COPPER ORES.

NO SALE on Thursday last, November 15.

Copper ores for sale at the Royal Hotel, Truro, on Thursday next.—Mines and Parcels.—Devon Great Consols 1415—Hingston Down 510—Marke Valley 449—East Caradon 318—Devon and Cornwall 293—Wheal Friendship 214—Wheal Emma 148—Bedford United 115—East Russell 110—New Cornish 105—Crelake 90—West Maria Fortescue 72—New East Russell 35—Fursdon 20.—Total, 3904 tons.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week.—Mines and Parcels.—Wheal Rose 403—South Caradon 389—Clifford Amalgamated 372—North Treskerby 321—Fowey Consols 215—Phœnix Mines 187—West Caradon 161—Glasgow Caradon 126—Craddock Moor 120—Great Wheal Busy 58—Gonamena 46.—Total, 2401 tons.

WATSON AND CUELL'S MINING CIRCULAR

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and the state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON and CUELL they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

BOTTLE HILL.—In answer to "H. H.," on Oct. 27, we advised him not to sell his shares before the next meeting, as the copper lode might materially improve the prospects of the mine. As the 12 fathom level may now be said to be a rich lode, we have put on a few men to intersect it at the 24, and if cut as good as at the 12 (and it will soon be seen), we may very shortly have a rich and profitable mine. In the meantime, as it is most unjust to those who pay up their calls regularly that heavy arrears should remain on the books, a special meeting is to be held, to forfeit all shares upon which calls are due.

"J. S." (Leeds.)—Nos. 1, 2, 3, 4. We cannot make up our minds to recommend a sale at present, though results so far have been most disappointing. Should tin go up, 1 and 3 will improve; 2 and 4 depend on discoveries.

"A SHAREHOLDER."—According to the prospects of the Baryta Quarry, shares in the Mines Purchase and Finance Company (Limited) ought to be cent. per cent. premium, but we should be sorry to see the shares on the market, to be knocked about by "bulls" and "bears." We have always looked upon the company as a good and quiet investment, to pay a large rate of interest. Since the determination was come to to work the barytes the directors have had to devote a deal of time and attention to it, in order to prepare for executing large orders, and we may add that we have already orders for all that can be raised.

"***"—It is true there are 12,800 shares in the Prince of Wales, and, in a *prima facia* view, it may seem that it, therefore, offers greater facilities than usual for jobbing and market operations. But 6000 shares, or close upon half the mine, are held by *three* parties (including ourselves). And when we add that the Chairman of Devon Great Consols, Mr. W. A. Thomas, has lately purchased 2000 shares, after having the mine thoroughly inspected and examined, and has also joined the management, our correspondent may judge not only of the value of the speculation, but of the *objects* of those who endeavour to frighten people out of their shares by false and malicious statements, based upon every little change in the value of the lode. We are firmly convinced in our own minds that the lode in the 55 fm. level, which may be seen this year, will send shares to double their present price.

GEOLOGICAL SOCIETY OF LONDON.—Nov. 7: Prof. A. C. Ramsay, LL.D., F.R.S. (Vice-President), in the chair. The Rev. W. Gover, Saltley College, Birmingham, was elected a Fellow. The following communications were read:

1. "On some Remains of large Dinosaurian Reptiles from the Stormberg Mountains, South Africa," by Prof. T. H. Huxley, F.R.S., V.P.G.S.

2. "Additional Notes on the Grouping of the Rocks of North Devon and West Somerset," by J. Beete Jukes, M.A., F.R.S., F.G.S.

Commencing with the country around Wiveliscombe, near which place Sir H. De la Beche had indicated an east and west fault of small extension on the maps of the Gelogical Survey, Mr. Jukes described the rocks of the district reaching from that place north-west to the Brendon Hills, and westwards to Dulverton, including the valley of the Tone, more to the south. From Dulverton he examined the country towards Simonsbath, and then, proceeding to Barnstaple, made traverses from that place to Challacombe and Bittadon. Similarly, after examining the neighbourhood of Combe Martin, he proceeded along the north coast in an easterly direction, through Countesbury, Porlock, and Dunster, and across the Williton valley to the Quantock Hills. The observations made during these several journeys were given in detail by the author; and the principal conclusions at which he had arrived in consequence were stated to be the following:—1. There are three areas of Old Red Sandstone in this region—*a*, the Quantock Hills; *b*, the Porlock, Minehead, and Dunster area; and *c*, the Morte Bay and Wiveliscombe ridge.—2. Each of these masses of Old Red Sandstone dips under a great mass of Carboniferous Slate.—3. The Coal-measures, the Carboniferous Slate, and the Old Red Sandstone of Devon are contemporaneous with the Coal measures, the Carboniferous Limestone, and the Old Red Sandstone to the north of the Bristol Channel.—4. That if the great fault which the author believes to exist be proven to be absent, his other conclusions will not be altogether vitiated, for the red rocks of Porlock and Dunster may then be taken as the top of the true Old Red Sandstone, lying underneath a great thickness of Carboniferous Slate. Mr. Jukes had also been able to construct a geological sketch-map of North Devon in conformity with his views; and the paper concluded with a few notes explanatory of it.

The following specimens were exhibited:—1. Saurian Remains from the Stormberg Mountains, South Africa; exhibited by Prof. T. H. Huxley, LL.D., F.R.S., V.P.G.S.—2. Flint Implements from Toome, county Derry, and the Raised Beach of Larne, county Antrim; exhibited by R. Tate, F.G.S.

On Wednesday, the following papers will be read:—1. "On Marine Fossiliferous Deposits of Secondary Age in New South Wales," by the Rev. W. B. Clarke, M.A., F.G.S.—2. "On the Madreporaria of the Infra-liassic Beds of South Wales," by Dr. P. Martin Duncan, Secretary G.S.—3. "On the Structure of the *Lunuloidæ*," by Henry Woodward, F.G.S.—4. "Geological Description of the First Cataract, Upper Egypt," by J. C. Hawkshaw, B.A., C.E., F.G.S.—5. "On some Echinodermata from the Cretaceous Rocks of Sinai," by Dr. P. Martin Duncan, Sec. G.S.

THE INSTITUTION OF CIVIL ENGINEERS.—On Tuesday, the first paper read was on the "Results of the Employment of Steam-Power in Towing Vessels on the Gloucester and Berkeley Canal," by W. B. Clegram, M. Inst. C.E. The second paper was "On the Employment of Steam-Power upon the Grand Canal, Ireland," by Mr. S. Healy. The discussion upon the employment of "Steam-Power on Canals," will be resumed next Tuesday, when a paper will be read "On the Smelting of Refractory Copper Ores with Wood as Fuel in Australia," by Mr. J. L. Morgan, Assoc. Inst. C.E.

STORING PETROLEUM.—In order to promote economy in the storage of petroleum, the substitution of iron tanks for barrels seems now to have been thoroughly resolved upon in America; and the benefits to be anticipated from the change may be judged of from the statement in the *Stockholder*, that whilst the export of petroleum from American ports was only 7,716,092 gallons in 1865 (Jan. 1 to Aug. 1), it amounted to no less than 30,184,142 gallons in the corresponding period of 1866, showing an increase of 22,468,140 gallons. The saving in the handling of this quantity alone would have amounted to $2,000,000 in the mere item of barrels; which, through the use of these tanks, would have been in great part dispensed with. The tanks correspond in outward appearance with small gasometers, and are built of iron, like a steam-boiler in all respects, except as to size and shape, with joints riveted and caulked steam-tight. The oil is received and discharged through intervening chambers, rendering it impossible for fire to reach the contents of the tank, even if a conflagration should completely envelop it. They are so constructed that the volatile gases arising from the oil are confined and re-condensed, so that their escape is prevented, except under extraordinary circumstances, when the pressure might endanger the tank by bursting—as in the case of the heat of a conflagration. Provision is made by which, in such cases, the gas escapes by an automatic valve, and may burn, but cannot set fire to, the oil. The percentage of loss by evaporation and leakage on oils in barrels is estimated at 2¼ per cent. per month, and in open tanks it greatly exceeds that. By the use of these tanks the uniform quality of the oil may be maintained. It is the nature of petroleum, when standing in bulk undisturbed, and under the influence of changes in temperature, to resolve itself into different grades, the paraffin and heavier constituents depositing at the bottom and the liquid gradually growing lighter as it ascends, until it becomes gaseous. This is a source of great loss and embarrassment to the holder, as much of the paraffin becomes so solid that it cannot be drawn from the tank, and the fluid oil is proportionally deteriorated by its loss. As a consequence, the holder is often obliged to sell an oil too light for the market (a special gravity of about 45° Baume being required to refine well), and thereby submit to a loss on his oil, and to dispose of the residuum for a small price. By this system of storing the paraffin can be restored to the oil in any quantity as required, so that the best gravity can always be supplied, and also heavy grades, such as command enormous prices, because so indispensible to mix with the extra light oil, of which there is always an excess on the market.

PETROLEUM AS FUEL.—The invention of Mr. E. M'KINNEY, of Clarkville, U.S., relates to an improved means of feeding petroleum to stoves, furnaces, &c., to serve as a fuel. It consists in the employment of water, or other fluid having a greater specific gravity than petroleum, and placing the former in an elevated tank or reservoir communicating with the lower part of the petroleum chamber by means of a pipe, so that the petroleum will be fed to the fire-pan or chamber by static pressure.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

BARYTES.—Will anyone, through the medium of your valuable Journal, inform me who will buy barytes, and about the price per ton?—A READER.

MINING BY MACHINERY.—In last Saturday's Journal you gave a description of an invention by Mr. Berrens, by which the cutting of hard rock is greatly facilitated. Can any of your correspondents inform me if it can be used in sinking shafts, where it has been at work, and with what effect?—COPPER.

PEAT FLOORCLOTH.—In your valuable Journal of last Saturday I notice under the above heading the special abstract of a patent granted to Mr. T. G. Ghislin, for making floorcloth and other articles from peat, which patent is dated March 5, 1866. The first patent ever granted for the manufacture of floorcloth and various other articles of utility, such as roofing, flooring, &c., from peat, was granted to John Longbottom, engineer, of Leeds, and myself, and was dated July 5, 1865, eight months before the date of Mr. Ghislin's patent. We have established a factory for its manufacture on a large scale, which answers to our complete satisfaction, and the article, in the shape of floorcloth, and named "kampukaon," is already in the market. I will shortly do myself the pleasure of sending you a full account of our patent, and mode of working, which I doubt not will prove interesting to some of your readers. —ABRAM LONGBOTTOM.

TINCROFT MINE.—"X. Y. Z."—The complaints in reference to the statement of accounts, &c., only being charged up to June last, and the liabilities up to end of Sept., 1865, only discharged and vouched for, is in the hands of every shareholder, and they have their own remedy.

CLIFFORD AMALGAMATED—WHEAL SETON.—I should feel obliged if some reader could explain how it happens that the Clifford Amalgamated sold in September 12,279*l.* worth of copper for the quarter, and yet is not a dividend-paying mine? Wheal Seton pays dividends of 20 per cent. on shares at 150*l.*, the sale of copper ore recorded in the same Supplement being only 3577*l.* 17s. for the quarter.—A. V.

QUEBRADA.—The dissentient shareholders are invited to lose no time in uniting for their mutual protection. The Chairman informed us at the late meeting that we should be paid what the shares were at present worth in the market, or less if they suffered any further depreciation. Now, it has been evident that they have for some time been under a depressing influence, and it is not difficult to see that they may easily be "beared" to nothing by interested parties. But is there no redress for such a state of things? At all events, let us take competent advice.—A DISSENTIENT.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, NOVEMBER 17, 1866.

Notwithstanding the rate of discount has been reduced by the directors of the Bank of England to 4 per cent., no beneficial effect has been produced on the general state of the money market; but, on the contrary, there has been great langour in every department, and an indisposition to enter into fresh transactions. The fact is that this step on the part of the Bank has been fully anticipated, and although it has nominally reduced the value of money to this low standard, confidence is not yet restored, and for general purposes it is, consequently, very immaterial whether the rate is 1 or 2 per cent. higher or lower, so long as there is apathy on the part of the public to invest in enterprises which bear the semblance even of a speculative character. A better tone would, perhaps, have been given to things in the City if the announcement from the Bank had not been concurrent with the fact that the drafts of the well-known house of Messrs. DENT and Co., of China, had been refused acceptance by their London correspondents; and as the transactions of this firm are most extensive—estimated, indeed, at between two and three millions sterling—it is feared that the consequences will be most serious in the many places where they had interchange of business, and so bring down other establishments. At all events, it gives a handle to the alarmists to prognosticate evil, and to justify their constant declarations that the panic is far from having passed away. However, the Bank directors evidently do not regard matters in this light, and the reduction of the rate to so small a figure must work its influence in due course, and give impetus to every branch of industry. It is, therefore, very important to consider into what channel capital will flow as commercial faith revives. That financial companies have had their day is universally admitted, and the attraction of anticipated enormous rates of dividends will not for some time to come have any influence with the investing public. Railways, likewise, are not in the ascendant in the estimation of those who have money at their command, while the recent exposures as regards banking operations are not likely to engender confidence in any new institutions of that kind. Mining enterprise, therefore, seems to be the direction which offers more profitable results with little risk, and, judging from our correspondence with different home districts and various continental countries, this is evidently a growing impression. It is true that the price of copper is low, and discouraging to those who are prosecuting such works; but, on the other hand, there are several plans under consideration for working poor ores, with such economy and improved appliances that the increased quantity will make up for the decreased value. Projects are maturing for developing some valuable deposits of mineral in Sardinia, which are said to hold out great prospects of success, and plans are under consideration for purchasing extensive works in Algeria, which have been brought into a forward and efficient state by French capital and talent. In Portugal, also, much preparation is making for launching companies, or combinations of moneyed men, to open up various localities, both in the north and south of that kingdom, where lodes of copper and lead, of high percentage of yield, have been laid bare, sufficiently to warrant further outlay. Some deposits of magnetic iron ore, of the richest nature, have, it is said, been met with in the neighbourhood of Lisbon, so to speak from their proximity to the railway, which are to be developed by a combination of English and Portuguese shareholders. Altogether, therefore, it may be said that the tocsin has sounded in this branch of industry, and it is believed that the commencement of the new year will usher in many associations of this nature, which will be warranted by their prospects and indications; and it is only to refer to the Board of Trade returns, which we furnish month by month, to show the magnitude of mining, and how every department increases, which surely would not be the case if the results were not remunerative.

The advices by the present mail, from Australasia generally, are most unsatisfactory in a commercial sense. The effect of the panic in this country continues to produce its corresponding consequences in these colonies, and suspension of confidence is the result, every branch of industry is more or less disorganised, and the banks themselves are represented as being thrown off their balance, and become timid in their operations. The banks, however, our correspondents write, have tended mainly to this state of affairs, for while everything bore a favourable aspect they encouraged special enterprises by injudicious money assistance, but in a time of difficulty are unable to stem the storm which their own indiscretion has, in a measure, created; in fact, the complaint from Victoria is that "too much of the banks' money is locked up in not readily convertible squatting securities, and that there is too little money available for the daily operations of commerce." This not only refers, it appears, to the commercial interests in its more ordinary sense, but applies equally to mining. "The pick," it is remarked, "goes less briskly in the deep sinkings of Ballarat, because money in Threadneedle-street was at 10 per cent., yet most of these establishments have branches in the mining districts" for making advances to the miner to assist him in sinking his shaft, and prosecuting his underground explorations, so that the banker buys the gold before it is out of the ground, and the miner has to work down an advance already spent for stores and wages."

These allusions have special reference to Victoria, where the gold fields are the great source of wealth and benefit to the colony; yet, strange to say, if these averments be true, the bulk of assistance rendered by the banks has been to the pastoral and squatting interests, although it is obvious that the more the gold-producing localities are supported in this way, the greater will be the production to work its influence, not only locally, but in the mother country and over the world. The same spirit of short-sighted policy has also been worked out in South Australia, and the present mail brings intelligence of a failure in Adelide of an important mercantile firm, which has shaken certain interests to their centre, and this arising almost entirely from a desire to monopolise sheep walks and cattle runs, fostered by the ready advance on the part of the banks to promote such gigantic operations. It appears that one bank, we believe the South Australian, with a capital of 500,000*l.*, lent about one-fifth of this amount to this firm alone, which has its resources almost exclusively engaged in pastoral pursuits. South Australia is as important in its production of copper as Victoria is for gold, yet strange as it may seem, it is nevertheless most true that these most important branches of their industry are relatively overlooked by the banks, in their monetary arrangements, for the more uncertain results of agriculture and pasture, which are subject to every kind of drawback, in the shape of drought, plague, and disease, by which thousands of heads of cattle are destroyed with great rapidity, and whole crops totally annihilated; whereas the yield of metal is totally devoid of all these casualties, and must, necessarily, be a better security for the advances made. It is certainly remarkable that the banks which owe their origin, influence, and position to these mineral productions, both in Victoria and South Australia, should so completely overlook the staple commodities of both colonies, and it is a subject of grave importance for the directors and shareholders of the respective banks to look into. Indeed, it is a question whether the banks were not in every sense of policy and commerce bound to support these interests in their need, instead of adopting such stringent measures that failure was inevitable where there were not means independent of bank accommodation, and producing stagnation in every branch of the trade and commerce of the colony.

NOVA SCOTIA, AND HER COAL MINES.

The coal mines of the province of Nova Scotia are prominently referred to in an advertisement in this day's Journal, inviting the investment of British capital therein. Many of the readers of the *Mining Journal* are probably aware that there is a scheme already rough hewn, and merely awaiting finishing touches from the foremost men of the British North American provinces, some of whom are already in this country, and others daily expected—a scheme under which the province of Canada, with Nova Scotia, New Brunswick, Prince Edward Island, and, perhaps, Newfoundland, it is expected, by virtue of an Act of the Imperial Parliament, will, ere long, be confederated. Three times already this subject has been referred to in the opening and closing speeches of Her Majesty, and it is destined to find a conspicuous place for the last time, probably, in that important document at the opening of the ensuing Parliament. Nova Scotia alone has an area of upwards of 18,000 square miles; New Brunswick, 28,000; and Canada, 330,000. The population of this vast territory, at the present moment, is estimated to be quite 4,000,000 of souls. Here in England, we are far more familiar with Canada, her trade, her exports, and imports, than with the maritime provinces, as they are called. But there is full justification for asserting that both New Brunswick and Nova Scotia, if not exactly keeping pace with the larger province in the race of improvement, are not lagging far in the rear. Nova Scotia has within the last decade taken rapid strides, and appears at the present moment, as her statistics abundantly show, to be in a state of great prosperity. A glance at the quotations for Colonial Government Securities shows that at present her Government Six Per Cent. Debentures are quoted at 98 for the 100*l.*, and business done at 97½.

Canada is not a coal-producing province, although coal oil has been discovered there, and is produced in considerable quantities. New Brunswick, it is said, contains a vast coal field, but, up to the present time, no seam of sufficient thickness to render it available for export, or even for domestic purposes, has been opened. In Nova Scotia, however, the position of the case is far different. Some of the finest seams of coal in the world—one of 30 ft. in thickness—are found, and actually being worked, in that province. The General Mining Association, the stock of which is in great favour, and principally, if not entirely, held here in London by private individuals, have extensive mining operations both in Pictou and Sydney, Nova Scotia. Coal mining, as a branch of industry, is evidently in its infancy in Nova Scotia; and yet statistics show that for the year closing with Sept., 1865, the quantity of coals raised and shipped was upwards of 650,000 tons. Of these, 400,000 tons were raised in Cape Breton alone. Cape Breton is an island, separated from the main land by a narrow passage, varying from half to one-and-a-half mile in width, and twenty miles long, navigable and safe for ships of any draught of water, and through it almost all the shipping to and from the River and Gulf of St. Lawrence passes. The island constitutes the eastern end of the province, and contains about 3500 square miles. It is one vast coal field—a continuation, no doubt, of the Pictou deposits on the main land, which stretch away westwardly across the province, and appear in Cumberland county, where they are known as the Spring Hill and Joggin Coal Mines.

The Government of Nova Scotia has recently been offering great inducements to capitalists to invest in these mines. They are all Crown property, and are leased in lots of one square mile, or 640 acres, to applicants, for a period of twenty years, with rights of renewals—the rent reserved being 10 cents, or 4½d. sterling, per ton of 2240 lbs.

Capital, it seems, has been flowing quite freely into Nova Scotia from the United States to secure and work these coal mines; and the amount of coal raised in 1865 was nearly forty per cent. over that raised in 1864. Referring solely to her coal mines—for Nova Scotia is rich in gold and other mines as well—it would appear that British capitalists will do well—and especially those conversant with coal and coal mines—not to allow so valuable a treasure as these Nova Scotia deposits to be controlled by foreign influences. In anticipation of the confederation now looming up so promisingly, this subject is full of interest, and the coal fields of Nova Scotia at no distant day will furnish employment for British labour and British ships, and a profitable investment for British capital, to an extent of which few persons at the present moment can form any proper estimate. These coals are all bituminous and gas-producing, whereas the American coals east of the Alleghanies are mostly, if not entirely, anthracite; consequently, the provincial coals maintain their prices well in the American seaboard markets, notwithstanding a tariff of about 6s. per ton recently imposed. But this measure having been carried by a majority of a single vote or two at the last Congress, it is confidently expected that it will be almost immediately repealed. Under any circumstances, in view of the conflicting opinions of scientific persons as to the extent and future productive capacity of the English coal fields, this is an interesting topic; and in these days, when heat and motion are said to be convertible terms, one which may well command the most respectful attention.

MAKING IRON DIRECT FROM THE ORE.—As a remedy for the defects in the ordinary process of manufacturing iron direct from the ore, Mr. C. M. DUPREY proposes that the ore first freed, as far as possible, by water or otherwise, from its earthy impurities in a crushed state, should be placed with pulverised charcoal in thin sheet-iron canisters, in quantities sufficient, when reduced, to form a mass of iron of the usual weight of a puddle ball. An ordinary sand-bottom iron heating furnace is brought up to a reducing heat, and with a thick clear fire the canisters are introduced. The furnace is carefully maintained at a reducing heat in the usual manner by small additions to the fire from time to time, as required, and by a careful exclusion of the atmosphere. Very little blast and a suppressed draft are used, so as to furnish a reducing heat without cutting the canister. The operation resembles very closely the process for annealing sheet-iron. Soon after introduction the canister is annealed and toughened, assuming a polished appearance. It should be the aim to keep the heat in this condition until the metal is thoroughly reduced: should it be increased the canisters may be prematurely destroyed. Deoxidation commences immediately on the introduction of the ore, as proved by the blazing of carbonic oxide from vents made for the purpose, and, by occasionally rolling, and at the proper time compressing the canister, it continues without intermission until reduction is completed. The heat should then be raised to weld or paste together the particles of iron, and then canister and contents, being withdrawn, are welded,

in any of the ways puddle ball is usually treated. The whole operation need not last longer than from four to six hours, and it is estimated that, allowing for all possible contingencies, a saving of fully 30 per cent. on the present cost of iron would be effected.

COAL IN FRANCE.—During the past year Rouen consumed 90,728 tons of French and Belgian coal; but the other seaports of the department of Lower Seine imported 585,819 tons of coal from English mines. With all the facilities of transport now existing, English coal cannot be had in Paris under 2*l.* a ton!

THE IRON TRADE—(*from a Correspondent.*)—As an indicative of prospects of the iron trade, we may inform you that we have offers from Belgium to-day of Sheet Iron at 20 frs. per 100 kilos., equal to 8*l.* per ton, free on board at Antwerp, with usual discount, &c.; the quality is good. Now, Staffordshire is not working half time, the nominal price of sheets is still 10*l.* 10s. at works, and the masters do not put down the price for fear of a struggle with the men—thus the workmen are driving the trade from the country.

Another Correspondent ("J. B.," Liverpool) also writes—

"It may not be generally known that we are now receiving from the Continent a large number of locomotives, and as England has hitherto prided herself more especially upon that branch of manufacture, and as the artizans employed therein have acted as if they enjoyed a monopoly, at any rate for those required on our own railways, it may be as well to give them also an illustration of the practical effect of combinations, strikes, and exorbitant demands made upon employers. The locomotives above alluded to have been received from Zurich (*via* Antwerp and Goole). Several have already been shipped from this port for our railways in India, part of a large contract, some 20 or more, yet remaining to come forward."

EXPORTS OF STEAM-ENGINES.—The value of the steam-engines exported from the United Kingdom experienced a slight advance in September, the total for that month having been 192,906*l.*, as compared with 168,304*l.* in Sept., 1865, and 132,216*l.* in Sept., 1864. The increase observable in September was attributable to the augmented demand from British India and Russia. The aggregate value of the steam-engines exported to September 30 this year was 1,160,585*l.*, as compared with 1,458,842*l.* to the corresponding date of 1865, and 1,130,341*l.* to the corresponding date of 1864, so that, on the whole, the demand for our steam-engines has declined this year as compared with 1865, although it presents a slight increase as compared with 1864. The value of the steam-engines sent to Egypt has largely declined this year, the total to Sept. 30 being only 66,285*l.*, as compared with 302,246*l.* to the corresponding date of 1865, and 232,003*l.* to the corresponding date of 1864. The value of the steam-engines sent to Russia appears to have been steadily increasing during the last two years, the total to Sept. 30 being 147,571*l.*, as compared with 108,129*l.* to the corresponding date of 1865, and 89,674*l.* to the corresponding date of 1864. British India also takes more and more of our steam-engines, the value of the steam motors sent in that direction to Sept. 30 being 293,435*l.*, as compared with 204,552*l.* to the corresponding date of 1865, and 182,244*l.* to that of 1864.

THE OIL TRADE IN AUSTRALIA.—The value of the oil-producing shales of the Hartley district have been already referred to, and amongst the additional companies formed for working them the last mail brings intelligence of the formation of the East Hartley Kerosene Company, with a capital of 30,000*l.*, for the purpose of working some 1680 acres of mineral property about four miles from Pulpit Hill, on the Great Western Railway, and 13 miles from the Blue Mountain Inn, where it is expected the line will be open for traffic by the end of the year. There are two workable seams of cannel only 12 miles apart, one 3 ft. 3 in. the other 4 feet thick. There are also several seams of common coal of great thickness and of excellent quality, as well as iron ore and fire-clay in abundance. The analysis of Prof. Watt shows the cannel seams to yield respectively 150 gallons and 117 gallons of crude oil to the ton. Our correspondent writes that the seams of cannel belonging to the East Hartley Company are undoubtedly valuable, being the only discovery yet made approaching in thickness and quality the seams of the Hartley Kerosene Oil Company; he suggests, moreover, that the East Hartley Company would be willing to offer favourable terms to capitalists who would undertake the manufacture of oil from the mineral raised.

IMPORTANT DISCOVERY OF MINERALS IN SCOTLAND.—Exploratory works have recently been undertaken in Ayrshire, which have proved the existence of valuable deposits of lead and iron, most conveniently situated for working. The lead is to be seen in the beds of the burns or brooks, and where the banks are precipitous the veins can be traced high up in the bank. Five or six different veins have already been discovered, and as in some cases these are 4 or 5 miles distant from each other, the generally mineralised character of the district can be fairly judged of. The iron has been found in the side of a high hill, and it is seen cropping out at several places. A lease for 21 years, embracing the right to all minerals, except gold and silver, within an area of from 15,000 to 20,000 acres, has been granted, and Mr. Alexander Blane, of Alton-Albany, by Girvan, is now prepared to negociate the sub-letting or sale of the privileges secured. A box of specimens has been forwarded to the *Mining Journal* office for the inspection of those who may feel inclined to take an interest in the matter; the ores consist of galena, embedded in a soft spar, and of promising appearance, and of extremely pure red hematite. A sample of the lead ore has been assayed by Prof. Frederick Penny, of the Andersonian University, Glasgow, who reports a produce of 76·42 per cent., or 15 cwts. 1 qr. 7 lbs. of lead to the ton of ore, and nearly 3¼ ozs. of silver. There is no impediment to the profitable development of the property, and as the land is occupied as sheep-farms but little would have to be paid for surface damage. An advertisement relating to the disposal of the property will be found in another column of this day's Journal.

CORNISH MINERS IN SCOTLAND.—The immigration of Cornish miners has created considerable sensation in Scotland during the past fortnight, and the local colliers are working most energetically, not being always very particular as to the means employed, to prevent any increase in the number of importations. The *Glasgow Herald* has a most impartial and sensible article on the subject, which well explains the position of affairs. It states that "it would appear that some time ago the Messrs. Baird, of Gartsherrie, Messrs. Merry and Cunninghame, the Shotts Iron Company, and other ironmasters, acting upon a suggestion thrown out in the *Mining Journal*, and commented upon in our columns, began to make preparations for trying the experiment of importing a number of men to their works. A gentleman connected with one of the firms we have mentioned visited some of the mining localities of Cornwall, and met with numbers of the men, to whom he explained the object of his visit, and the terms upon which he would be willing to engage any of them to go to Scotland. The works which have received a supply of the Cornishmen are:—Gartsherrie Ironworks, Summerlee Ironworks, Carfin and Jerviston Collieries; Loanhead, near Penicuick, belonging to the Shotts Iron Company; Eglinton and Portland Works, and Hurlford Colliery; and besides these a few have been distributed amongst smaller works. The Cornishmen appear to consider the change most satisfactory, and many others will, doubtless, follow them. There is plenty of room for double the number of Cornish miners than have arrived; and as there are hundreds of idle men in Cornwall, and hundreds who are making a mere pittance—scarcely half what can be earned here—this immigration will benefit both Cornwall and the mining districts of Scotland." The subject is referred to in the letter from our local reporter in another column.

UTILISATION OF BLAST FURNACE GASES.—That the gases produced in blast-furnaces can be turned to profitable account has already been proved, yet it is generally acknowledged that there is much room for improvement in the modes of utilising them. Messrs. SPARROW and POOLE, of Wrexham, have recently patented an invention which is considered to offer great advantages. The invention has the further recommendation that it can be applied, with very trivial modification, to furnaces in blast. In applying the apparatus to furnaces out of blast Messrs. Sparrow and Poole construct a curved chamber by preference of boiler-plate, the inner external surface of which fits the tunnel-head above the feed-openings. This chamber may be of rectangular or other convenient vertical section. This curved chamber encompasses about six-sevenths of the tunnel-head, and is enclosed at each end by doors, for convenience of cleaning and repairing it. The bottom is provided with rectangular vertical passages, one between each feed-opening, which open into the bottom of the rectangular chamber, and extend downward through the foot-plates of the feeding-stage and the brickwork of the neck of the furnace, so as to extend about 6 ft. below the charge where they open out through the sides of the furnace, the lower ends being constructed with lateral funnel-shaped mouths. Each passage conveys gas to the chamber, whence it is conducted beneath a boiler or other position, to be burned.

FOREIGN MINING AND METALLURGY.

A meeting of the Belgian General Railway Plant Company was held on Wednesday, to consider the important question of the dissolution of the enterprise. The debts of the company amount to 381,000*l.*—viz., 110,000*l.* on a first mortgage, 96,000*l.* on a second mortgage, and 175,000*l.* in obligations maturing at various periods between the end of the current year and 1875. The Molenbeek workshops, the Antwerp brickworks, and what remains of the plant used in the works connected with the fortifications of that place will be transferred to the Railways Working Company, in consideration of a capital of 240,000*l.*, in obligations, subject to the condition that the Antwerp bricks, plants, &c., represent a sum estimated on a valuation at 100,000*l.*, on which an abatement of 10,000*l.* will be allowed. Further, certain fittings and tools at Molenbeek are to be completed at an expenditure estimated at 6000*l.* The 240,000*l.* forming the purchase price will give rise to a *rente* of 15,400*l.*, including redemption in ninety years. The old Railway Plant Company is to realise for its own advantage the Clichy and Maubeuge premises, as well as the Milan workshop. The product will be devoted to the partial repayment of the mortgage debt of 110,000*l.*, and the remainder of the debt is to be paid within four years by the new Railways Working Company. The 96,000*l.* forming the second mortgage debt is to be paid out of the 240,000*l.* receivable from the Railways Working Company. The balance of the 240,000*l.* will be applied to satisfy the claims of the obligation holders, who will receive the remainder of their dues by means of sums expected to be derived from the definitive liquidation, more especially from the Antwerp affair. Such are the arrangements proposed in connection with the liquidation of the Belgian General Railway Plant Company, but it is possible that they may yet receive more or less material modifications. The Belgian iron trade presents little change. There is, however, no improvement in pig, and industrials are still discussing the propriety or otherwise of extinguishing certain blast-furnaces; the measure still remains undecided on. It is difficult, if not impossible, to attempt to give prices, the business effected being concluded on secret terms. The price has been named in a great transaction for rails, but it must be considered as inexact, the conditions of the contract being very imperfectly known, even by those who speak of it with the most assurance. Further, prices vary in each rolling-mill; this want of understanding has long existed, and it has now become especially prejudical. Merchants' bars and plates are not so well held since prices have retrograded in Paris. Doubts were, we believe, expressed under this head three months since of the prudence of erecting new rolling-mills, which could only have the effect of burthening and inconveniencing industry, without remunerating the capital engaged. The indulgence of these doubts seems to have been perfectly just, since the Roux rolling-mill, which has scarcely been in operation three months, is about to be sold. The Belgian coal trade presents a more quiet aspect, since prices have reached a point at which foreign competition would be possible at Antwerp, and, perhaps, even in Belgium itself. It is evident, in fact, that the most important branch of the home trade—that of the metallurgical works—will soon endeavour to free itself from its present difficult position; to pay for combustible at its present price is very difficult, and if there is a means of obtaining it more cheaply if may be affirmed, without fear of contradiction, that that means will be found. The coalowners cannot certainly be blamed for profiting largely from a state of affairs such as that which has resulted of late from a demand in excess of the extraction; but on its side industry is quite justified in endeavouring to pay as little as possible for so indispensable an element as combustible. This antagonism between two irreconcileable interests may break out some day or other, and it will certainly break out if coalowners abuse the present state of affairs. From this point of view, the check which is observed in the upward movement of coal appears rational and advisable. However this may be, the state of affairs in the different Belgian basins continues excellent; the demand is sustained, and large deliveries are made. One difficulty alone arises—viz., the want of plant; and the question is asked, "What will be the state of affairs in the winter, when orders will have to be attended to more rapidly, and when navigable streams will not furnish the large transport assistance which they at the present time supply?" Mention is made at Liége of the acquisition by the house of Wendel of the Marihaye Colliery, for the purpose of supplying the coke furnaces which that firm possesses. But this report is at least premature. The Vieille-Montagne Company commenced the payment on Saturday of the second half of the dividend of the exercise of 1865, or 7s. 4d. per tenth share. The Centre de Gilly Collieries Company is paying a dividend of rather more than 17 per cent. for the exercise 1865-6. The Silesian Zinc Mines and Ironworks Company commenced the payment on Thursday of a second dividend of 4½ per cent. for the exercise 1865. Meetings are announced as follows:—Jemeppe-Auvelais Collieries Company to-day (Nov. 17), at Marchienne-au-Pont; Vesdre Blast Furnaces Company, Nov. 20, at Liége; Phœnix Mines and Ironworks Company, at Laar, near Ruhrort; Lavoir and Blanc-Misseron Mines and Ironworks Company, Nov. 30, at Antwerp; and Ougrée Collieries and Blast Furnaces Company, Dec. 1, at Brussels.

Some contracts for charcoal-made pig are understood to have been concluded at St. Dizier, at 4*l.* 8s. 10d. to 4*l.* 9s. 8d. per ton. Iron is in no great demand in the St. Dizier district. A few further details may be acceptable with regard to the new Franco-Belgian Company, formed for the construction of railways in Russia. It appears that the Russian Government has charged the Baron de Vrieré, M. Schacken, and other gentlemen with the construction—first of a line from Kieff to a point of junction with the Odessa and Balta Railway, near the village of Borichi, with a branch from Bazatino to Berditcheff; and, secondly, of a branch from Imerinka to Valstchisk, on the Austrian frontier. The new company further undertakes the supply of the plant and accessories required for bringing into operation the line from Balta to Kieff, and various branches. The works, and the delivery of the plant, are contracted for by the concessionnaires with the Russian Government, which pays in *rentes*. The earthworks have been already commenced on the Kieff and Balta line. The new company will be known as De Vrieré, Schacken, Bruneau, and Co.; it is this company which has just ordered in Belgium 49,000 tons of rails. J. F. Cail and Co., of Paris, and the Fives-Lille Company (Parent, Schacken, and Co.) will take part in the works, and the delivery of plant. The Russian Government is understood to be on the point of granting other similar concessions, as it desires to accelerate the construction of a network of railway lines in the great Russian empire. Meetings are announced as follows:—Colliery Company of the Moselle, Nov. 24, at Paris; Province of Santander Mines and Foundries Company, Nov. 24, at Paris; Franche-Comté Blast Furnaces and Forges Company, Nov. 29, at Besançon; Basse-Indre Forges Company, Nov. 29, at Paris; and Pontgibaud Mines Company, Nov. 30, at Paris.

Chilian copper has experienced, during the last fortnight, sensible fluctuations at Havre; the last advices, however, represent the article as quiet, at the prices of last week; for disposable purchasers would present themselves at 77*l.* per ton, while for delivery at the end of December business has been done at 77*l.* 10s. to 78*l.* per ton. The good tone of the London market has exerted a favourable influence on the German "places." Transactions are not very numerous, but there is much more firmness in prices, and the majority of holders hope for an early revival of business. At Cologne former prices have been firmly maintained; at Berlin the various qualities offered have experienced an advance; and at Hamburg there have been no modifications in the prices quoted. The Paris market has been quiet, but firm; Chilian is sustained at 77*l.* to 78*l.*; Corocoro mineral at 81*l.*; and English at 86*l.* per ton. On the Dutch markets tin has somewhat hardened; at Amsterdam holders will not "cede" below 46½ fls.; and at Rotterdam 500 blocks of Banca have found purchasers at 46¼ fls.; 1100 blocks at 46½ fls.; 300 to 400 blocks at 46¾ fls.; and 800 blocks of Billiton at secret rates (supposed to be 45¾ fls.) The annexed comparative table shows the deliveries and stock during the last five years:—

	1862.	1863.	1864.	1865.	1866.
January ..Blocks	5,105	9,335	5,165	4,230	11,950
February	8,4·5	8,665	9,190	4,987	7,959
March	4,335	7,650	6,085	9,640	17,236
April	6,766	4,638	6,377	5,660	24,192
May	9,400	4,760	6,443	3,890	22,739
June	4,650	9,172	8,928	5,900	10,579
July	34,400	14,757	25,851	27,297	4,574
August	30,637	29,764	55,520	33,611	11,525
September	12,119	5,453	13,950	9,450	7,950
October	12,332	6,816	9,600	10,410	32,950
Total	128,209	101,010	147,109	115,075	151,654

The stock on schedules, Oct. 31, was 166,309 blocks; as compared with 121,759 blocks, Oct. 31, 1865; 76,356 blocks, Oct. 31, 1864; 87,820 blocks, Oct. 31, 1863; and 80,955 blocks, Oct. 31, 1862. The unsold stock of the Society of Commerce, Oct. 31, 1866, was 50,468 blocks; as compared with 73,014 blocks, Oct. 31, 1865; 47,185 blocks, Oct. 21, 1864; 39,393 blocks, Oct. 31, 1863; and 55,805 blocks, Oct. 31, 1862. The German markets have displayed a better tendency, and prices have been firmer. Prices have experienced no modification at Cologne; but at Berlin and Hamburg there has been a slight advance in Banca, in consequence of the advices received from Holland. At Paris, Banca has been quoted at 84*l.*; Straits, at 83*l.*; and English, 83*l.* per ton. Lead has continued firm, without, however, numerous transactions; no material change has occurred in prices. At Hamburg zinc has been held firmly at former rates, although buyers are not very numerous; the quantities offered for sale are, besides, of little importance. On the Breslau market there has been little activity; purchasers finding the prices asked too high for ordinary marks have held somewhat aloof; but, on the other hand, holders present little goods for sale on the market—a course which assists materially to maintain the value of the article. An animated movement of affairs is anticipated shortly. Paris prices have presented little change, Silesian making 21*l.* 16s. per ton.

The New Schottland (Prussian) Metallurgical Company decided at its annual general meeting that instead of distributing a dividend of 6 per cent., a sum of 120,000 thalers, forming the nett surplus of the financial year, should be devoted to the improvement of the financial position of the concern in order to preserve it from all the vicissitudes of the market. The total rough profit of the past exercise was 201,462 thalers, of which 8278 thalers were added to the reserve. Miscellaneous meetings are announced as follows:—Prague Iron Industry Company, Nov. 19, at Vienna; Austrian Company for the Fabrication of Chemical and Metallurgical Products, November 26, at Vienna; Carlsruhe Company for the Construction of Machines, Nov. 28, at Carlsruhe; and Darmstadt Company for the Construction of Machines, Nov. 28, at Darmstadt. The selling prices fixed for the Sarrebruck coal, as from Nov. 1, present a sensible augmentation on those previously charged, especially as regards the Louisenthal group.

The ATLANTIC AND PACIFIC RAILWAY, from New York to San Francisco, will be 3200 miles long. It passes through St. Louis, Kansas city, the heart of New Mexico, and gets into California, near the head waters of the Colorado River, by a low pass in the Rocky Mountains. The railway is rapidly being made from both termini. By January, 1868, it will be extended 1870 miles from New York, to within 200 miles of the Rocky Mountains. In two or three years time a person will reach San Francisco from England in little over a fortnight, and he will have made during that period an ocean voyage 3000 miles long, and performed a land journey of greater length. When the Atlantic and Pacific Railroad is completed the route to Japan and China, *via* New York and San Francisco, from this country will be much the best and quickest one.

REPORT FROM SCOTLAND.

GLASGOW, Nov. 14.—By the reduction of the Bank rate last week a slight amount of galvanic vitality was imparted to the market, and prices advanced about 9d. per ton, but on the succeeding day prices came back. Warrants not being quite so much pressed, they have again advanced, and are fully 6d. to 7½d. a ton better than they were before the last operations of the Bank. It cannot be denied that the tone of the market is anything but cheering, and little change is expected before the turn of the year. The stocks and make of pigs are rapidly decreasing, and what is purchased in the early months of 1867 will probably have to be bought at an advance of 5s. per ton on present prices. The shipments of the week show a decline of 3830 tons on the same week of last year, the figures being this year 9405 tons—last year 13,235 tons. This decrease may be accounted for to some extent by the boisterous nature of the weather at some of the ports of shipment preventing vessels from loading. This decrease adds to the aggregate decrease on the weeks of the year to date, and makes it now exceed 88,000 tons. At this day's market business was flat, and only a few lots were done at 53s. 7½d. and 53s. 6d. cash, closing, with sellers, at the lowest for prompt cash. Malleable Iron is, if anything, worse this week, and the number of orders booked are getting less numerous. Prices of all kinds of manufactured iron may be said to be in favour of buyers, but there seems to be a want of disposition to do business even at the lowest quotations. Foundry iron is in limited request, and only in a few foundries are the men working full time. The Woodneuk Ironworks, Coatbridge, were exposed to public sale here at the low upset price of 4500*l.*, without finding a purchaser—an event which could not have occurred a short time ago. The Coal Trade is brisk for all shipping qualities, but house coals are not in very great demand, and there is a tendency to lower prices. The shipments are nearly 10,000 tons in excess of last year, the quantity being 31,432 tons for the week just ended, against 22,160 in the same week of last year. Coals are rather getting into stock for the first time these last twelve months; the curtailment of business at the shale pits, and the importation of Cornish miners, and the temporary cessation of three-fourths of the smelting-furnaces, are multiplying the number of hands available for working the coal mines, and adding to the output. It would appear that the quantity of Scotch mineral oil is so far in excess of the demand that its price has been reduced about 300 per cent. within a year, and the quantity at present in the West Calder Company's stores, at Bathgate, is said to exceed half a million gallons. The manufacture of crude oil at these works is stopped, and only the refining process is being carried on. Nearly 300 persons have been thrown idle by this untoward circumstance.

The introduction of considerable numbers of miners from Cornwall has given rise to a strenuous opposition on the part of the miners, under the guidance of their secretary, Mr. M'Donald. At a meeting of the pitmen of the Airdrie district Mr. M'Donald was formally introduced by the Chairman, as if he had been a stranger.

In the course of his address he pointed out the varied *moves* of the ironmasters to reduce the wages within the last few months, and showed that the "Cornish inundation" was nothing but another move of the same evil family, and if the men were to do their duty it could easily be thrown back on the mine owners, who were so busy just now promoting the immigration. Mr. M'Donald then detailed the means by which they could do it, which was greeted with great applause. The meeting then considered the question of a levy to meet the present circumstances, when it was agreed that each man contribute 1s. 6d. per fortnight and carry on a vigorous agitation for a short time. Mr. M'Donald complimented the meeting on the prompt manner with which they had agreed to act; he only hoped they would pay as quickly, and there would be no fear whatever. He next adverted to the mighty co-operative movement now going on among the working classes, and advised his hearers to study it. For his own part, he thought they never would fully free themselves from the tyranny of capital till they began to see how to have their own coal fields, their own collieries, their own mines, ay, and their own furnaces. (Cheers.) The men of Rochdale had their mills: could not the miners of Scotland have their coal-pits? Yes, they could, if they would only will it—(cheers)—and he really hoped the day was not far distant when they would will it. (Cheers.) The profits would then be all their own, and they would know all the difficulties that the owners had to contend with. (Loud applause.)

One would have thought that even colliers could not have been gulled by a story of this kind; but there is no scheme, however utopian, that their secretary thinks right to propound that would not draw from his confiding auditors bursts of applause. We are happy to know that the Cornishmen are working away rejoicingly, although some capital was attempted to be made out of a reported defection from their ranks of some eight men, who had subscribed a document declaring "they had been deceived," and that they "repudiated the statements of John Rundell," &c. This document was immediately converted into a handbill, and sent over to Cornwall to deter others from coming. On the eight men being communicated with who were reputed to have signed the document in question, they were indignant, and to-day publish the following disclamer:—

"We, the undersigned Cornish miners, attended a meeting of miners in Coatbridge, on Monday evening, the 5th inst., in the Temperance Hall. We were induced to sign a document, respecting the true nature of which we were ignorant. Only now, when that document has been circulated in the form of a handbill, have we become aware of its real character, and of how we were imposed upon at that meeting. We have *not* been deceived in coming to Scotland. We are neither charged for oil nor powder. We most indignantly deny the statements in the postscript, and, in particular, that respecting our houses. We have been located in entirely new and good houses, which our kind employers have most generously furnished with bedding, chairs, tables, &c., at their own expense. In conclusion, we beg to state that we are pleased with the change we have made, that our employers have more than fulfilled their promises, and that we keenly feel having been so entrapped as to allow our names to be used in support of the utterly false statements attributed to us:—

JOHN GONIAN, from St. Just, Cornwall.
JOHN NANKIVEL, St. Breward, near Wadebridge, Cornwall.
JOHN GRIGER, St. Mawes, near Wadebridge, Cornwall.
WILLIAM MITCHELL, Cornish miner, from Bodmin.
JOHN TEAGUE, Cornish miner, from Bodmin.
FRANCIS SOLOMON, from Wadebridge, near Bodmin, Cornwall.
JOSEPH CALLICOATS, near Wadebridge, Bodmin, Cornwall.
PHILLIP DOCKING, from Wadebridge, Cornwall."

This is a specimen of the mendacity at work among the miners of Scotland, and we need not add that it can only end in discomfiture. We believe the introduction of Cornishmen will inaugurate a new era in practical mining in Scotland, and make it more profitable for both miner and master in the future.

The launches of the week were numerous, and include a screw steamer, named the *Scanderia*, built for the Anglo-Egyptian Navigation Company (Limited), London, of the following dimensions:—320 ft. by 35 ft. by 25 ft. hold; tonnage, 2000 tons. Built under special survey, to class A 1 at Lloyd's. She will be fitted by her builders with two pairs of engines, on the direct-acting principle, of most approved construction, and of the combined power of 250 horses nominal. There was another screw steamer launched for the Inman line of United States Mail Steamers, which was named the *City of Antwerp*, by Mrs. Inman, of Upton, Birkenhead. The dimensions of the vessel are—length of keel and fore rake, 322 ft.; breadth, 39 ft.; depth, 27½ ft.; tonnage, 2400 tons. O.M. She is divided by strong bulkheads into eight watertight compartments, and is to be propelled by a pair of direct-acting horizontal trunk engines of 450 horse-power nominal, with surface condensers, &c. Within an hour previous to the launch of the *City of Antwerp* another steamer belonging to the same line, named the *City of Baltimore*, left the dockyard of Messrs. Tod and M'Gregor, where she has been lying for the past few months, getting a thorough overhaul in her hull, her saloon, cabins, and passenger accommodation entirely renewed, in the same style as the other first-class steamers belonging to that line. She has also been furnished with new engines and boilers of the same power and construction as those of the *City of Antwerp*. Her strength and appearance differ in no respect from those of a new vessel.

REPORT FROM NORTHUMBERLAND AND DURHAM.

NOV. 15.—The Coal Trade here shows signs of weakness, prices having fallen on the London markets; this is partly the result of extremely fine weather for the season, and more particularly the stagnation in the Iron Trade in South Durham, which has caused an immense quantity of coals to be sent by rail and sea to London and other markets.

An interesting ceremony took place at the Cramlington Colliery on Thursday, in the very centre of the steam coal district proper. We allude to the commencement of a new shaft, to be sunk by this old, enterprising, and successful company. The new pit is to be known by the name of the "Scott Pit." The first sod was cut by Mr. Lamb, the senior partner of the colliery, and the ceremony was attended by Mr. E. Potter, the managing owner and viewer, and also by all the officials of the colliery. The first shaft at this important concern was commenced 40 years ago, scarcely anything was then

known of the minerals in the district, and great difficulties were met with in the sinking of the first shaft alluded to, the quantity of water being very large, but the owners persevered, and in spite of all obstacles the main, or Hartley seam, was won, and up to the present time this valuable seam has afforded a good supply of the best steam coal, and is likely to do so for many years to come. The Scott Pit is in an extensive royalty adjoining the old works, and this, together with the old works, and those at the Shank House, will form one of the most extensive works in the North. The winning of the Hartley seam of coal at Cramlington led the way to the opening of the Seghill, Seaton Delaval, and, indeed, to all the extensive works in that district, which have proved of so much importance to the commerce of the Tyne. The main portion of this coal is shipped in the docks on the north side of the Tyne, which are now much too small for the accommodation of the shipping which resort to them.

An important report, lately published by Mr. Ure, engineer to the Tyne Commissioners, is worthy of especial notice. He reviews what has been effected lately by the Tyne Commissioners, and also advises as to the measures to be carried out in future. It appears from this report that the piers at the mouth of the Tyne have not advanced so quickly as was expected, but that the effect produced by them is all that can be looked for, being beneficial in every respect. But the formation of Low Lights Dock, which was advised by Mr. Ure on the completion of the piers, cannot yet be constructed, and he, therefore, advises the extension of the Northumberland Dock; and he also recommends that the berths at the staiths on the river be made deeper, so as to accommodate the steamers which now frequent the river in large numbers. The effect of this he calculates will be to expedite the loading of such vessels very much, and shorten their stay in the river, and at the same time it will give additional accommodation for sailing vessels in the docks. The improvement of the Tyne proceeds, on the whole, most satisfactorily, and it is now frequented by vessels of large size. The improvement of the River Wear is also attracting much attention, and the depth of water is to be much increased at the mouth of the Wear, and also at the entrance to the South Docks. It is expected that during the ensuing year very superior accommodation will be provided at this rising port for vessels of all kinds and dimensions.

The iron men, with some exceptions, still obstinately stand out, and refuse to accommodate themselves to the circumstances of the times. At East Jarrow the workmen of Mr. Elliott have gone in at a reduction of 5 per cent., this being a compromise, each party giving way a little. There are at those works about 18 pudding-furnaces, rolling-mills, &c. The number of men at work at the large ironworks at Jarrow is also increasing steadily, and this is the case throughout the district, although the men go in slowly, and evidently with the greatest reluctance. It is expected that a large order will be got shortly for the shipbuilding yards at this place, and also several orders for the engine and boiler works.

The leading chemical manufacturers of England, amongst whom are Messrs. Tennant and Co., of Glasgow and the Tyne, and several local makers, are organising a large joint-stock company to work the mines in Spain, from which they derive their principal supply of pyrites and manganese. At present the price of manganese is higher than it has been known for many years past, partly owing to the failures which took place in Spain last year, and pyrites is also extremely dear. The material is brought from the mines to the coast, just as the material for china making was carried from the seaports in England to Staffordshire above 100 years ago, when the Potteries were in their infancy, on the backs of mules and horses. The English manufacturers are determined to thoroughly develope the mines in Spain, and to connect them with the coast by railways. The capital of the new company is 200,000*l*. Large quantities of pyrites, it is anticipated, will be brought to the Tyne, which will find more employment for shipping, and will tend to develope our import trade. After the sulphur is extracted from the ore by the alkali manufacturer, the residue will be sent to the Metal Extracting Company's works at Hebburn, a large and flourishing concern, to have the copper taken from it.

Another meeting has been held at Neville Hall in connection with the NICHOLAS WOOD MEMORIAL, but nothing very definite has been done, and there certainly appears to be some ground for fearing that unless more unanimity can be obtained the ultimate decision will be the subscriber shall erect a memorial according to his own taste—as, for example, a bust of Mr. Wood in his counting-house, or, perhaps, on the top of the pit-head frame of the colliery with which he may happen to be connected. That the Memorial Hall is the best suggestion seems to be beyond doubt, and everyone should, therefore, content himself to use his best efforts to carry out the project. The proposed addition of busts of gentlemen (other than the late Mr. Wood) is, of course, an excellent suggestion, and the proposition to establish a Newcastle Mining College, which should, if possible, be connected with Durham University, is still better, but these are questions for subsequent consideration. The Memorial Committee recognise the importance of the suggestions, and, if permitted to use their own excellent judgment, would certainly take care that the hall erected should be capable of providing the necessary accommodation for a full course of college lectures, as well as serving all the purposes of the Mining Institute; if every subscriber interfere such a happy result can scarcely be hoped for. It requires some powerful effort to be made to increase confidence in the committee, and to lead the subscribers to work together to assist rather than impede them. The final resolution arrived at was that, provided the money could be raised, a hall, to be in connection with the Mining Institute, be erected, and that a committee be empowered to arrange as to estimates, plans, and the collecting of subscriptions, and that in the hall there shall be a bust or statue of Mr. Nicholas Wood. Other busts are to be admitted, and the committee are to obtain plans and estimates for the hall, and to advertise the subscriptions received towards its erection.

REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 15.—In the Iron Trade of this district the general quietude which has characterised business transactions of late on home account remains undisturbed, and there are no indications on the part of makers to push trade; in fact, they appear to have made up their minds to let things take their natural course, believing that sooner or later the home demand will become tolerably active. As yet business has not been favourably affected by the reduction in the Bank rate of discount to 4 per cent., nor by the want of profitable employment for money, but there is no doubt that the reduction in the rate of discount is an encouraging feature, and that it will in time tend to give greater confidence to all branches of trade, and it is hoped that the iron trade will come in shortly for its fair share of the expected benefit. As regards quotations, there is no likelihood of their being lower; in fact, makers are barely able to sell at the present rates, but having tided over the winter, and with a tolerably active spring and summer trade, they may fairly look forward to obtaining more remunerative prices. The demand for plates is still depressed, mainly in consequence of the straitened condition of the shipbuilding trade, and the general inability of buyers to enter into transactions. Within the past fortnight there has been a decided improvement in the exports of iron, particularly to the markets of the United States, considerable qualities having been cleared out for New York, Baltimore, New Orleans, and one or two of the other markets. During last month there was a total of 19,261 tons exported from the several ports of the district, as compared with 16,649 in the previous month of September, and there is every prospect of the tonnage shipped for the present month being in excess of that for October. At those establishments which have secured American contracts their execution is being pushed forwards as much as possible, so as to secure delivery this year, and specifications are coming in with a tolerable amount of regularity, much better than was expected a few weeks back, and almost equal to anticipations towards the close of last quarter. The prospects of spring business with British North America and the markets of the Baltic continue of a hopeful character, as orders are quietly but gradually being placed from those quarters. With South America trade is exceedingly quiet, as it is also with the West Indies. On Egyptian account a very fair quantity of railway iron is being shipped, but the present demand is of a restricted character. An improvement has taken place in transactions with Italy and one or two of the other continental markets, which is likely to be maintained. There is no alteration either in the demand or quotations for pig-iron; and for tin-plates the enquiry is moderately active, prices being fairly maintained for immediate delivery. The steam coal collieries are well employed, and the output for the foreign and home markets is considerable. There is an increased sale for house coal, and merchants are purchasing largely on coasting account.

At the Pontypool Police Court, another case of wilful recklessness on the part of a collier, employed at the Glyn Pit, has been brought before the magistrates. The defendant's name is Frederick Clarke, and he was charged with an infringement of the colliery rules. Mr. Alexander Edwards appeared on behalf of the Ebbw Vale Company (Limited), to support the charge. He stated that the defendant had been guilty of taking a naked light into a part of the Glyn Coal Pit, from doing which, by the rules, he was strictly prohibited, and that considerable danger was to be apprehended from his doing so, as the lives of from 200 to 300 men were jeopardised; yet, as defendant had expressed sorrow for his conduct, complainants hoped the Bench would deal leniently with him. The Chairman observed that the rule or bye-law compelled the Bench to deal leniently with defendant, as the fine it imposed was restricted to 40s., and he would be convicted in that penalty.

Thomas Perrott, Morgan Bevan, Roderick Jones, and Abraham Jacobs, haulliers in the employ of the Hirwain Iron and Coal Company (Limited), were charged before Mr. Fowler, stipendiary magistrate at Merthyr, for having unlawfully left their employ. The case against the defendants, which was adjourned from the previous Saturday, was that on Monday they refused to go into work at the Bute Pit, alleging as a reason the filthy state of one of the "partings." The "parting," however, had been cleared, and the men went to work on the Tuesday. Mr. Fowler then expressed his opinion that their going into work on the Tuesday was equivalent to a renewal of the contract between the employers and the employed, but adjourned the case to see if defendants still kept to their work. On Saturday last, Mr. Roper, for the company, raised a fresh point, that the defendants had not been doing a fair day's work since then, but Mr. C. H. James, who appeared for the defendants, showed that, so far as they were concerned, this complaint was groundless. Witnesses were then examined as to the state of the pit, and it was admitted that though the "parting" was cleared, the men were not told of it. Mr. Fowler, therefore, held the objection was *bona fide*, and said if it were not, there was the other point—whether the offence was not purged by the prosecutors retaining the men in their service on the Tuesday after they had refused to work on the Monday. To this the reply was that the company had vessels waiting for cargoes at the ports of Cardiff and Swansea, and they could not dispense with the services of the men. The defendants were discharged.

A meeting of the Tillery Colliery Company (Limited) creditors was held at Newport, on Tuesday, at which the statement of assets and liabilities showed good debts and cash in hand 1000*l*., and doubtful debts about 500*l*.; whilst the liabilities amounted to 4000*l*. The shares are 15*l*. each, with 12*l*. 10s. paid, and it is estimated that by making a call of 2*l*. 10s. per share a sufficient sum will be realised to pay the creditors 10s. in 1*l*.

Messrs. Hill and Batt, of the Oakfield Wire Works, Cwmbran, near Newport, have dissolved partnership, and in future the concern will be carried on under the style or title of Messrs. Hill and Company.

At an adjourned meeting of the New Clydach Iron Company creditors, the statement of assets and liabilities showed—Liabilities, 24,000*l*., and assets, 21,000*l*., exclusive of the value of the works, upon which there is a mortgage. It was resolved that the concern should be carried on under the inspection of Mr. Roper, of the Cwmbran Works, Mr. Ashwin (Bailey and Co.), Abergavenny, and Mr. Taylor, financial secretary to Mr. Brassey, the great contractor, who is a shareholder. Mr. George Findlay, Mr. Field, Mr. Grierson, and other gentlemen of high position are also shareholders. The whole capital is paid up.

To the already colossal works of Messrs. Vivian and Sons, copper smelters and rolling mills, Swansea, there are now being added some works for the manufacture of superphosphate of lime. The building is not yet completed, but work will commence as soon as possible, under the management of Mr. Taylor, a gentleman of considerable ability in the department which he is engaged to supervise. The works of the Messrs. Vivian, for extent and variety, are the largest of the kind in the world.

Mr. J. J. Jenkins, the managing proprietor of the Beaufort Tinplate Works, has recently become connected with the Swansea Iron and Tin-plate Works, for many years carried on so successfully by Mr. Thomas Boundy, and subsequently by Messrs. Boundy and Voss. Both works are now under the able management of Mr. Jenkins, and are the property of one proprietary.

At the Mynydd Newydd Pit, Morriston, a few days ago, David Davies, foreman of the sinkers, fell from the stage on which he was standing (one corner having given way), and was precipitated below to a depth of 53 yards. In his descent he broke a pole in twain, 6 inches in diameter, which crossed the pit, and the only injury he sustained was a broken ancle. His escape from the effects of a fall from so great a height is simply a miracle.

On Wednesday last, at the Police Court, Swansea, Mr. William Duncan Pegg, son of Mr. William Pegg, colliery proprietor, of Birchgrove, was committed to the House of Correction for two months, for having personated his father at the late municipal election for the borough. He had voted for Mr. Sydney Hall, manager of the Patent Fuel Works, Swansea, in the name of his father, who was absent. His friends gave notice of appeal, and he was released on heavy bail, pending the hearing of the case in the superior courts.

The arrivals at Swansea include—the Josephine, from Cherbourg, with 125 tons of zinc ore, for T. Walters; Golondina, from Chanaral, with 720 tons of copper regulus, for H. Bath and Son: St. Pierre, from Santander, with 204 tons of zinc ore, for E. G. Madier; Leo, from Kragara, with 150 tons of nickel ore, for H. H. Vivian; the Henry Grenfell, from Cuba, with 640 tons of copper ore and 30 tons of copper regulus, for the Cobre Mining Company; the Swansea, from Bolivia, with 25 tons of bar copper and 473 tons of copper ore, for H. Bath and Son; Rosetta, from Caldera and Pan de Azucar, with 200 tons of copper ore, 45 tons of silver ore, and 400 tons of copper ore, for Richardson and Co.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Nov. 15.—Notwithstanding the unsettled state of affairs in Derbyshire, business continues good, and most of the iron establishments are tolerably busy. At Staveley there is no diminution in the quantity of iron made, and there is a fair enquiry for gas and water-pipes and other qualities of manufactured iron; the same may also be said with regard to the works at Renishaw, where a large trade is done in pumps, and a good deal of pig turned out. The ore for the last-named establishment comes principally from the firm of Butlin, Bevan, and Co., of Wellingborough—certainly a long distance, considering the proximity of other districts where fine ore is attainable. The Coal Trade continues active, and the quantity being sent to London is rapidly increasing, as merchants are desirous of being prepared with stocks in the event of more severe weather setting in. The returns show that there was sent to the metropolis from Clay Cross in Oct. 21, 219 tons, against 17,447 for September, whilst the Staveley Company forwarded 7652 tons, being a considerable increase on Sept. The total quantity sent into London by rail for October was 333,720 tons, and for the first ten months of the year 3,452,091 tons. In Sheffield and the neighbourhood business remains in much the same state as it has been for some weeks past, the only difference being that the ironworkers in the employ of Messrs. Brown and Co. (Limited) have refused to take the reduced prices offered to them, so that no inconsiderable number are now idle, and in the present state of the iron trade the prospects of their being speedily engaged is by no means bright. Indeed, unless at some of the machine and casting establishments, business is far from being good, and there does not appear to be any signs of a reaction taking place. At Milton and Elsecar matters are rather better, and most of the ironworks are kept tolerably well going. At the former establishment the patent furnaces of Mr. E. B. Wilson, of Edinburgh, have been undergoing some alterations. That gentleman has just paid the fees and had his patent protected. The invention is a considerable improvement on the patent granted to Mr. Wilson in 1863 and 1865, and consists, so far as the original part of the patent is concerned, in the application and use of an inclined metal plate for carrying the fuel in furnaces, the providing of a hot-air chamber, with a door or doors, for supplying the burning fuel with a current of hot air, the application and use of a grid, or grating, or perforations communicating between the hot-air chamber and the burning fuel, and the application and use of an air conduit, or conduits, leading to the hot-air chamber. The furnaces for months past have been visited by a large number of persons connected with the iron trade, and there appears to be scarcely two opinions as to the value of the invention, which not only economises the quantity of fuel used, turning out a better quality of iron, and, what is of equally as much advantage, they consume the smoke as fast as made. From the ease with which the ordinary puddling-furnaces can be converted to the patent principle there is little doubt that their pretty general adoption is a mere question of time; and as Mr. Wilson has devoted several years, and spent a vast deal of money, in perfecting his invention, it is to be hoped that he will ultimately be rewarded for his perseverance and skill. At Penistone, and some of the other steel works, there is a fair amount of business being done. The demand for Bessemer steel continues good, and bars, tyres, and axles of the same material are being largely turned out, whilst orders are coming to hand to such an extent that no falling off appears likely. The furnaces on the Lincolnshire side of the Trent are kept fully going, and a large export trade is being done, the iron made being of a very superior quality, commanding higher prices then the Yorkshire or Derbyshire. The export of the ore from the same district into Yorkshire and Derbyshire is kept up to the average.

In South Yorkshire the Coal Trade was scarcely ever better, there being, if anything, a brisker enquiry, more especially for the southern markets, the railways during October having carried into London 21,366 tons of Silkstone house coal, and 21,870 tons of the Barnsley seam, making a total of 43,236 tons, against 28,500 tons for September. As many of the mills in the cotton districts have been put on short time, there has been a falling off in the quantity of engine fuel sent into Lancashire, and it is scarcely expected that the winter rate of prices will be maintained, should there be a further falling off in the orders sent. The export trade by way of Hull and Grimsby continues large, and masters are pushing stocks off as fast as possible, as the news may now be expected almost every day that the Baltic ports have put on their impenetrable coat for the winter, stopping all ingress, and leading to a number of steam-vessels being laid up for some months to come. There is not so much business doing with Sheffield and neighbourhood, owing to the depression in the iron trade; whilst the recent failure in Northamptonshire of Mr. Pell has also cut off another prop. Still, things were scarcely ever better in the district, and masters are in a position to sell more, were there plenty of accommodation, than they are raising.

A singular fact in relation to the history of the coal trade of Yorkshire has just turned up, and it is not a little surprising. It appears that in the year 1857, when there was no Miners' Union, the quantity of coal raised in the Barnsley district was 2,521,120 tons, a quantity which it has not since attained, whilst in 1864 it had fallen off to 1,435,000 tons, showing a loss to the masters on a comparison of two years of more than 270,000*l*., and to the men in wages of upwards of 60,000*l*. So much for disputes and strikes! The colliers at Staveley and Clay Cross appear determined to join the Union, and it is now evident that a serious collision is imminent. The endeavours of the proprietors at both places to put their workmen in a position superior to that to be found in any other colliery district has not been appreciated to the extent expected, and whilst at Clay Cross, schools, a hall, a hospital, &c., and everything that could tend to the welfare of the miner and his family has been done, yet the voice of the agitator has prevailed. At Staveley, also, the company have expended a very large amount in schools, &c., a workman's hall, and have subscribed most liberally to every institution that tended in any way to promote the well-being of the workpeople and their families, who for years past have been in a most comfortable position, and in that respect could stand favourable comparison with any colliery body in the kingdom. But all that has been done avails not, and the men now appear likely to sacrifice that position and the comforts of home at the instigation of men who are strangers to them. At present a number of men are under notice at Clay Cross, and it is expected that other notices will be given. At Staveley the men who were ordered by the County Court Judge to give up possession of their houses have done so without being turned out. A further number of notices have been given to persons holding houses under the company, but as they have not left their cases will be tried in the County Court in the course of a few days. The Springwell men's notices will expire on Dec. 1, and it is not unlikely that notice will be given to the whole of those men to leave their houses at the same time as their notices expire. There have been some disturbances, in which the non-Union men have been badly treated, but the company have expressed their strong determination to give every possible protection to those men. In a very few weeks more will be seen a large and hitherto prosperous community sacrificing their work and their comfortable homes to become something very much akin to paupers.

Mr. Jevons read a paper in the Manchester Scientific Students' Association, Manchester, "On the Probable Exhaustion of our Coal Seams." The views he enunciated were similar to those contained in his well-known work. He was followed by Mr. Plant, who gave it as his opinion that the actual area of our coal fields could not be approximately calculated, and that the eastern boundaries of the British coal fields were really not known, and could only be so by actual experimental boring. [The lecture of Mr. Jevons is fully reported in another column of this day's Journal.]

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 15.—The Iron Trade continues dull, and, if anything, the tone to-day at the Birmingham Exchange was fully as gloomy. This is natural as Christmas draws near, for transactions are always curtailed before the end of the year; and, as the stream has been running very shallow for some time, a slight diminution of the water feeding it is soon felt. Pig-iron appears rather more on offer, and vendors seem rather more inclined to yield. Very best makes of hot-blast all mine do not fetch more than 3*l*. 15s., and perhaps the buying quotation is a shade lower than that. Makes of inferior quality run down to a pound less. The Hardware Trades present no decided change. There is a good demand for small arms, and this trade, which was flat while all others were brisk, is now exceptional in activity.

In North Staffordshire a lock-out has been resolved upon by the earthenware manufacturers in the Potteries in North Staffordshire, which, if carried out, may prove a serious misfortune. The cause of this decision may be briefly stated. For many years the custom of employing the various branches of artizans in the earthenware manufactures for a year from Martinmas week, which is the present week, has prevailed in this district. Of late years objections have been made to this system on the part of the men, who contend for an engagement terminable at the expiration of a month's notice. There exists in the Potteries a Masters' Union, which comprises most, indeed almost all, of the leading manufacturers, and by far the greater number of smaller makers, of earthenware. The annual hirings take place under an agreement prepared by the Potteries Chamber of Commerce, and one of its terms is that a workman is released from his engagement if his employer fails to find him a certain number of days' work per month. Hitherto that period has been 16 days. The masters have, however, met the opposition to the annual agreement by enlarging this minimum period from 16 to 20 days' work per month, and they have also granted a substantial advance of wages. In the great majority of cases the workmen have re-engaged, but the overmen and flat-pressers about Burslem and Tunstall hold out, and the masters have decided not to re-open their works until they yield. The manufacturers urge that as they have to enter into arrangements with foreign markets, an exposure to a demand for higher wages would during the year operate to their disadvantage, and to the disarrangement of their trade. The men meet this by agreeing to pledge themselves not to ask for an advance during the year, but, of course, this can be merely an honourable pledge, as unless they are bound for a year it cannot be legally an obligation upon them. It is certainly a serious responsibility for the masters to stop the whole trade, and reduce to idleness the 19 out of 20 who are willing to work, and have actually hired.

It is gratifying to find that the affairs of Messrs. James Russell and Sons, of the Tube Works, Wednesbury, are considerably more satisfactory than supposed. They are enabled to continue the execution of orders as heretofore, and there is easily realisable property (without touching plant, premises, or private estate), sufficient to pay 20s. in 1*l*. The stock and good debts are equal in value to the whole liabilities, and the good debts alone—now being collected at the rate of about 1500*l*. per day—exceed 33,000*l*. The profits are estimated at upwards of 15,000*l*. a-year, and these will continue. The interference with the business is attributed entirely to the determination of certain creditors not to have their interests endangered by the private speculations of an individual member of the firm.

THE NEW SHROPSHIRE COAL FIELD.—Anyone looking at that portion of the Geological Ordnance Map which includes the county of Salop, will notice a division coloured black, and lying north-east and south-west between Wellington and Shiffnal. The district thus distinguished is on the west side irregular, and even fantastic, in outline, but on the east its boundary is marked by a line that errs from the straight only by a few easy curves. The dark colouring laid upon one division of the map does not denote, as might not unreasonably appear at first sight to one fresh from missionary meetings and unacquainted with geology, the absence of Christianity, but the presence of coal; and the other colours used on the map, varying from a light drab to a bright red, do not typify the different degrees of civilisation locally attained, but designate the presence of the several strata which underlie the soil, from alluvium to basalt. The prominent patch of black represents, in short, the coal field of Shropshire, and while the devious line on the west side shows where the bed is hemmed in by walls of sandstone, shale, and millstone grit, the streak of white which edges the black on the eastern side indicates the "Great Shropshire Fault," beyond which, as far as the South Staffordshire field, geologists have agreed that there is, and can be, no coal. But the dictum of the geologists has been falsified by facts, and a few weeks ago we had the pleasure of reporting the proceedings at a dinner whereat a distinguished company of gentlemen, presided over by the Earl of Granville, assembled to celebrate the successful issue of an attempt to find coal in the proscribed district.

This important discovery of what is really a fresh coal field in Shropshire happened in this wise. The Lilleshall Company hold under leases from Lord Stafford and other large landowners the rich mineral district, comprising the villages of St. George's and Prior's Lee, bordering upon and extending for some distance to the east of the Great Fault. One condition of their tenure was that they should sink a pit somewhere on the reputed "dead ground" for the purpose of trying conclusions with those who upheld the theory of the impossibility of the presence of coal. Accordingly, after looking about for the least unlikely place, the managers of the company fixed upon a field a few yards south of the turnpike road, and marked out a couple of pits. This was on Nov. 2, 1864, and for two months the men went on very comfortably, picking their way through the sandstone. But in the early part of the new year, when they had got down some 30 yards, the pent-up gas and the waters which are under the earth, burst out upon them in great bulk, and further progress was stayed till larger buckets and more powerful machinery were got to work. At 50 and 70 yards there was more gas and more water, but the draught took away the one, and the buckets managed to keep down the other, and fair progress was made till they got through the first 100 yards, when they came upon a quartz rock of a degree of hardness fortunately not often encountered by coal miners. This stratum was only 10 yards in thickness, but it took the men four months to get through it, and when they succeeded it was to meet with water in such floods that the works had to be suspended during three months. At the end of that time the miners were put on again in greater numbers, and made slow but steady progress, till they reached a depth of 172 yards, and were met by more water and gas. At length they struck the 200th yard, which it had taken them nearly two years to reach, and no wonder that those who had to pay for the work were getting weary of the experiment, and experienced a livelier faith in the creed of the geologists. However, the terms of the lease were definite and inexorable, and, as the stipulated depth had not yet been reached, there was nothing for it but to fall to again. Fall to they did, with more buckets and fresh tools, and on Aug. 29, having sunk a depth of 205 yards, they came upon the three-quarter coal, immediately overlying the double coal. Four days after, the miners, working very fast now—struck the yard coal, and the yellow ironstone, working through which, to the depth of 2½ feet, they found the white flat stone, and ultimately reached the flint coal, lying 4 feet 2 inches thick.

The coal, discovered under such unpromising circumstances, lies horizontal, is free from faults, and will yield 27,000 tons to the acre. It has been computed, from carefully ascertained data, that the mine contains 10,000,000 tons of coal, and that for more than 50 years the annual yield will be 150,000 tons. At no modern period would the addition to the natural stock of so much mineral wealth as that which lies hid in the New Stafford pits be viewed with indifference; but at a time when the probable duration of our coal supply occupies a prominent place in the public mind, the discovery of a mine which promises an aggregate yield equal to one year's supply from the whole of the Staffordshire and Shropshire fields, appears singularly opportune. There is, however, a special feature about this discovery, which adds greatly to its importance. It has established the fact that the Great Shropshire Fault does *not* bound the Midland coal field, which centres in South Staffordshire, and already the question is being asked by practical men why, if coal is found east of Pryor's Lee, it should it not be sought in other districts of the hitherto condemned county. From observations carefully made by gentlemen of authority in geological matters, it has long been conjectured that the North Shropshire and South Staffordshire coal fields are but sections of one great basin, a theory which gains valuable support from the proved existence of coal beyond the supposed boundary

line of the Shropshire bed. There is little doubt that the connecting seams have been most extensively "denuded," or swept away by the action of waters subsequent to their formation. But whether in passing over the eastern portion of Shropshire, and commencing to sink again in Staffordshire, the seekers for coal take up the *first* link of the missing chain, is a question on which there is now more than ever a grave difference of opinion.—*Birmingham Daily Post.*

THE PROBABLE EXHAUSTION OF COAL.

Professor W. S. JEVONS rend a paper on "The Probable Exhaustion of our Coal Seams" at a meeting of the Manchester Scientific Students' Association, in the theatre of the Royal Institution, Manchester, on Wednesday.

Professor JEVONS said that, although he should have occasion to speak of coal as the material basis of our modern civilisation, and as the mainspring of our national prosperity, he must not be understood to imply that it was the only basis, or the only spring, of our national greatness. Intellectual and moral greatness, true religion, and many other causes were requisite to make a nation great. But for England coal was the great material source of prosperity, and its chief source of power. Some years ago, at a meeting held to erect the statue of Watt, which now stands in Westminster Abbey, such distinguished men as Huskisson and Sir James Mackintosh spoke of the steam-engine as not only the most powerful instrument we could employ in changing the physical appearance of the world, but also as a moral lever to push forward the grand cause of civilisation. But, properly speaking, the steam-engine was only one of the means of using coal. The wood of England was burnt up a century ago, and now we could scarcely get wood for carpenters' use, let alone for burning. Not only was coal used in the steam-engine, but it was also that by which iron was made, and indeed it might be said that everything in this country was done more or less by the use of coal. To show what potential energy there was in it, he said that 1 lb. of coal, if all the force that was in it was let off, would lift its own weight 11,000,422 ft. high, notwithstanding the force of gravitation; or would lift the same number of pounds' weight 1 foot high. This force was obtained first of all by combustion. Heat was the great means used in all mechanical operations, and was the great mechanical agent. After showing to how many various uses coal was applied, he combatted the supposition that any other fuel might be substituted for it in mechanical operations by showing that all other forms of fuel were inferior to carbon; and that hydrogen, although it gave four times the heat for the same weight, was so many times lighter than carbon that, taking them in equal volumes, carbon gave 5000 times as much heat. It had been suggested that heat might yet be produced by other means, though it might not be by another kind of fuel. The continuous progress of science, it might be said, would yet discover a new force altogether; but those who argued thus overlooked the fact that the progress of science was every day increasing the power of coal, and if other sources of power—water-power, wind-power, or any other—could not compete with coal now, what chance was there that in the progress of science they ever would compete with it? The course of science was tending against such an argument instead of in its favour. But supposing something was found that would supersede coal, the result would be that England would be superseded as a producing country, because her material power was in the coal. The question next came to be considered, how much we were using of this extraordinary agent? There was a vague estimate, probably near the truth, that at the beginning of this century we consumed about 10 millions of tons a year. In 1854, when the first accurate estimate was made, it was found that there were 64 million tons annually consumed; and in 1865 the quantity was 98¼ millions. The vend of coal from the Newcastle coal fields was pretty accurately known from the beginning of the 17th century. It was then only a quarter of a million tons per annum. It doubled during that century, and in the middle of the 18th century it was 2½ millions; but since the beginning of this century it had risen to 18 millions. Since the beginning of this century, when coal began to be used all over the country, in making iron, in working steam-engines, and so on, the population, which during a century had been nearly stationary, had increased with equal rapidity, and there had been a corresponding increase in the national wealth. The question was—Could this increased rate of consumption continue? If it was to continue, the production of coal would outstrip all reasonable bounds. Here, again, there would be difference of opinion; some would say there was no reason why it should increase any further; but the fact was, there was no reason why it should not increase. We were only seeing the beginning of steam navigation; railways would continue to be made in all parts of the world; steam ploughing would, probably, be the rule 20 years hence; and in numberless ways we should, 20 or 30 years hence, be using coal in a way that we have no conception of now. He calculated that, in 50 or 100 years hence, so great would be the consumption of coal that its cost would be greatly enhanced, and we should no longer be able to increase in power and wealth as we were at present. Before considering that limit, he would enquire how much coal we really had, and how long we could go on consuming? Mr. Hull, a great authority on the subject, reckoned that there was within 4000 feet depth about 80,000 millions tons of coal; and at the present rate of consumption we should reach that depth in about 100 years. But nobody would be so foolish as to suppose we could go to that depth. Mr. Vivian, who was fond of speaking on this subject, said there was no difficulty in going to any depth. There were not many things in Mr. Vivian's recent speech in Parliament which it would be impossible to answer. For instance, he stated that, great as the pressure might be, there was no difficulty in mining under that pressure; that at a great depth the rocks held together so well that it was like making a hole in a big wall. But Mr. Vivian could not have looked into many collieries; for the pressure was very obvious in the Dukinfield Mine, which was, perhaps, the deepest in England, and the subsidence of the strata tended to shut up the air-ways. The same thing occurred in the Monkwearmouth Mine, so that a tunnel, which was once 6 ft. wide, would now scarcely let a man through comfortably. Great expense must arise from this cause; not only might a crush destroy the coal, and make it unmarketable, but it would destroy the air-ways, and render perpetual tunneling necessary to keep up ventilation. Again, there was the question of temperature. In the Monkwearmouth Mine the temperature was so excessive that the men were obliged to work without clothes. The temperature of the rock was 81°, but that of the air was frequently above 84°. Another statement of Mr. Vivian's was that the prime cost of the colliery was not of much account; that supposing 250,000*l.* was the cost of sinking the shaft, and 60 millions of tons were got out of it, that was only 1d. per ton. But in the first place, Mr. Vivian had omitted the interest, and that at 8 per cent.—4 per cent. for current interest, and 3 per cent. to cover all risks—was a moderate calculation. Supposing it took 10 years to sink a colliery—that was the length of time the Dukinfield pit took—and supposing the colliery could be worked out in 50 years, the cost would be increased to 4d. per ton; and if, as was more likely, it took double that time to work, the cost would be nearer 8d. per ton for the mere capital cost. Besides, if it was so easy to sink a deep pit, why were not more sunk? The Monkwearmouth Mine was sunk 40 years ago, and there was only one deeper begun since—the Dukinfield, 17 years ago. Yet in these deep mines they got the finest coal, and there were plenty more coal to be got at the same depth. This was, therefore, a practical test; people do not sink deep mines because they did not like the risk. It was obvious, then, that some difficulty would be incurred in course of time in sinking to a greater depth. Looking at our position as compared with other nations, he found from returns obtained by Lord Russell's Government from consuls abroad, in 1862 or 1863, and lately published as a parliamentary paper, that the annual get of coal in Great Britain, and the extent of its coal field, as compared with other nations, was as follows:—Great Britain, 98,027,000 tons, 5400 square miles; the Zollverein (Prussia, Saxony, &c.), 20,610,000 tons, 1370 square miles; the United States, 16,472,000 tons, 196,650 square miles; France, 10,710,000 tons, 984 square miles; Belgium, 9,935,000 tons, 510 square miles; Austria, 4,500,000 tons, 400 square miles; British America (estimated), 1,500,000 tons, 7530 square miles; Russia, (estimated), 1,500,000 tons, 100 square miles; Spain, 300,000 tons, 200 square miles; New South Wales, 250,000 tons; Ireland, 123,500 tons, 200 square miles. The figures relating to British America and Russia were taken from Mr. Hull's work, the rest from the parliamentary return, which gave latter figures than were to be found in any work. Ireland stood at the bottom, and when he heard so much about the condition of that country, he thought that was a fact that should not be overlooked. The miseries of Ireland were prepared millions of years ago, when floods denuded the coal fields, and left only the bottom measures. America has by far the largest area, and its resources were not in the least degree developed yet; and while we were encountering difficulty other countries would be developing their coal fields, and would ultimately pass us. No doubt we should retain a great many things; we could not be deprived of our position in the sea, which was fortunate for our commerce; but we should lose one extraordinary power which had been in our favour. He concluded by saying that we should not think of preventing or diminishing the use of coal, but when circumstances were in our favour we should use the wealth we possessed to the best purpose. When we had a revenue growing every year, it was just the time for us to devise some general principle of education, and we might also use our wealth for the reduction of pauperism and crime. If we use our wealth in the best possible way we need not look very anxiously forward to a future time. (Cheers.)

Mr. J. PLANT said that Prof. Jevons had omitted one very important point in relation to the coal area. He had left out of his calculation the 8000 miles of what was called anthracite coal, which, added to the area of the better burning carbonaceous coal, would give about 12,000 square miles for Great Britain. The economic difficulties stated by Mr. Jevons might be logically arrived at from his data; but the actual area of the coal fields could not be approximately calculated. The eastern boundaries of the British coal fields were really not known: where it rested on the Paleozoic rocks, there was a proper boundary, but where it rested on Permian or Oolitic rocks it was impossible, in the absence of experimental borings, to say how far the coal extended in the eastern direction throughout Great Britain. It was possible that there might be enormous quantities of coal in that direction still unknown to us, which would in course of time be discovered; but in the absence of these experiments the quantity still unworked could not be fairly estimated. After referring to the large quantities of coal exported from England to Brazil, to America, to the continent of Europe, and even to Australia, he said that if these foreign countries could purchase our coal at double or four times the price paid for it in England, and yet compete successfully against England in many manufactures, what was to hinder us, if our supply did run short, to go to the United States and obtain our supplies with equal facility, and still be able to compete with the world in respect to our manufactures and metal products? He did not, moreover, despair of their finding, by the aid of science, a substitute for coal, and geologists were not altogether inclined to say that there was that prospect of exhaustion of our coal which should make us dread that such a time would speedily come. (Cheers.)

Mr. E. HULL said that, without going the length that Mr. Vivian did in Parliament, they might start with the proposition that the actual quantity of coal in the British islands was practically limitless. Our coal fields were but the outcrops of an enormous tract of country, the greater part of which was concealed below newer forms. The great plain of Cheshire, bounded by the coal fields of Staffordshire, Lancashire, and North Wales, was stored with coal, but unfortunately at a great depth. In some parts the depth would be 5000 feet. The coal in the eastern direction was probably over-estimated, because there was strong evidence of the existence of an old barrier of Paleozoic rocks stretching across the central part of England, commencing in Wales and stretching through South Staffordshire north-eastward along the borders of the Leicestershire coal field, and how much further in that direction he did not know. But, leaving out that portion, and taking the area where coal was known to exist, the supply was actually exhaustless. It, therefore, resolved itself into a question of depth of production. On the former point it was difficult to arrive at a conclusion. He took 4000 feet as the limit, for the reasons stated in his work; but the depth at which a coal seam was capable of being worked with profit depended upon its thickness and quality, all other things being equal. It might be possible to work a seam only 2 feet thick and of good quality at a depth of 300 yards, while it would not be equally profitable to work it at 500 yards. Therefore, if they took the seams according to thickness and quality, commencing with 2 feet, and allowing for increase in the price of the coal and cost of mining, proceeded to a 3-feet, and so on to a 7 or 8-feet seam, with increase of depth in the same proportion, he thought in that way the truest estimate would be arrived at as regards the quantity of coal which remains for future use. As regards pressure and temperature, he learnt from Messrs. Knowles, who were amongst the largest colliery proprietors in the world, that they were working coal at a depth of nearly 1000 yards, and so far as they could observe there was no practical limit to their working on account of either. The temperature depended on the amount of ventilation kept up, but these were questions which only experiment would be able to solve. But supposing in a few years the price of coal were doubled, that would not prevent a millowner from using the quantity he required in his mill, or any householder in weather like this from having a good fire in his house. There was room for a very considerable increase in the price of coal. In regard to economising coal, he hoped that the Act of Parliament would be enforced against the useless waste of smoke, and he was glad to see that a firm in this town had been ordered to abate the nuisance which arose from this waste of smoke at their works. (Hear.) He believed that Prof. Jevons was perfectly right in saying that whenever America was in a position to compete with us we should have to give way to her in the production of cotton goods and iron, because America could not only produce the coal, but the cotton as well. There was one country which was destined to be equally important as a coal-producing country with either Great Britain or America; he referred to New South Wales, where there was as large an area of coal as in either of these countries.

Mr. DICKINSON, Inspector of Mines, said that, as a member of the Commission appointed by Her Majesty to determine, so far as possible, these quantities, it would be prudent for him to abstain from offering any opinion on the subject. He had read the books of Prof. Jevons and Mr. Hull with great pleasure, and had listened with great satisfaction to this discussion. Mr. Jevons assumed that Monkwearmouth and Dukinfield Pits were the only two deep ones in the country; but such was really not the case, for since these pits were sunk the pits in this neighbourhood had been silently creeping down, until within about four miles of the room in which they were assembled there was one shaft deeper than Monkwearmouth—the Clifton Hall Colliery, which was 600 yards deep. The depth of Messrs. Knowles's pit had been exaggerated in the statement of Mr. Hull; the greatest depth at which coal had been worked in this county was 700 yards. (Cheers.)

Mr. DAVIES and other gentlemen having made a few remarks, the discussion terminated.

MINERS' CONFERENCE AT NOTTINGHAM.

The half-yearly conference of the National Association of Miners commenced its sittings on Tuesday, at St. George's Hall, Nottingham. The following delegates and officers were present:—President, A. M'Donald, Holytown, N.B.; treasurer, William Pickard, Ince, near Wigan; secretary, John Worral, Clifton, near Manchester. Delegates:—South Yorkshire, P. Casey, W. Ward, W. Silkstone, and W. Sidebottom; West Yorkshire, John Dixon and William Akroyd; Wigan, W. Baxendale and John Chisnall; Farnsworth and Kersley, Thomas Halliday, B. Hall, and Robert Lomas; Oldham, A. Tetlow and Joseph Fox; Ashton-under-Lyne, Philip Lloyd; Worsley, John Jackson; St. Helen's, Edward Rymer and Joshua Fairclough; Haydock, George Pickard; Brierley Hill, William Breakwell; Tipton, Thomas Plimmer; Derbyshire and Nottinghamshire, John Catchpole, John Hadfield, William Brown, Charles Besker, and William Green; Northumberland, Thomas Burt and John Nixon.—The President, having announced that on Monday the council had received into the association the district of Ashton-under-Lyne and Dukinfield, numbering 2500 members, said the association grew in strength every year, until, in 1863, a great Conference was held. At that time there were, unfortunately, internal divisions amongst them, and they were threatened with an almost entire dissolution. Wigan, Kersley, Farnsworth, South Yorkshire, and one or two other districts stood to their colours, however, and they had recovered from that condition. Glancing at the condition of the trade throughout the country, he said there was comparative peace in the great counties of Durham and Northumberland, but still there was a strong need of co-operation. There was war, or likely to be war, in Lancashire; and at Kersley the employers seemed determined to rule with a high hand. It was for them, however, to deliberate and consider what would be the best course to take upon these matters. Wigan, Kersley, Farnsworth, and the district of Cheshire worked as if no other districts existed—(Cheers)—and it was for this meeting to point out that these were only divisions of the same army, whose object ought to be to crush the present vile attempt to trample out their rights. He strongly recommended a conference on the part of the Lancashire miners, and said with reference to Derbyshire that it was now in a state of turmoil, and they should enquire how it could be brought to peace. It was only by a combination of all the miners. (Cheers.) In Scotland a continued struggle had been going on with the ironmasters, sometimes 10,000 men having been out of work, and the reason was that the men were determined not to put twelve hours' work into a day of eight hours—(Cheers)—and refused to make their bodies into machines and destroy there constitutions. The masters were now importing men from Cornwall, and there would have to be a strong fight. About 9000 workmen had been driven across the Atlantic, and the question which arose was how to preserve labour in Scotland and Lancashire, and swallow up the surplusage of labour in Cornwall, without injuring either class. Let them reduce their labour one-fifth, and by that means they could swallow up the labour of 10,000 to 12,000 men. He pointed out that in commerce and manufactures this principle was acted upon, production being curtailed in order to get a good price in the market. In Scotland the ironmasters closed their furnaces because at 55*s.* their iron did not pay; and he contended that the working men had an equal right to curtail their labour.—The delegates made their reports respecting the various districts which they represented. The Wigan delegate expressed his confidence in the ultimate success of the eight-hours movement.

On Wednesday, Mr. G. Pickard presented the report of the Haydock branch of the Association, and recommended a Conference of Lancashire miners, to take into consideration the short-hours movement. They had 1000 members, and there was a desire to remedy the grievances under which they laboured.—Mr. Breakwell, the Burnley delegate, stated in his report that the "butty system" was one of the greatest evils they laboured under, and he hoped the Conference would devise some remedy. They could do little, however, at present, in consequence of the disorganised condition of South Staffordshire.—Mr. Barker, from Derbyshire, said that as soon as the men at the Butterley, Staveley, and Clay Cross took action they were discharged and they had now more victims on their hands than they could support. The levy for the ensuing month would be 6d. per week. Men were ejected from their houses, and, as the Butterley Company had 700 houses, it was a difficult matter to find them lodgings. If they stayed with a friend a few days, that friend was also ejected. They really did not know what to do, but they were determined to stick to the Association.—After some further discussion, the President referred to the injustice of the Contract Law, and said the Committee appointed by the House of Commons to enquire into the subject seemed to be of opinion that an unjust state of things was in existence. On Saturday week he had an interview with Lord Elcho, who had communicated with the Home Secretary, and the result, he believed, was that either the Government would bring in a bill to amend the law, or his lordship, with the concurrence of the Government, would bring in a bill, the object of which would be to make the breaking of a contract a civil matter on both sides, and not a criminal matter to the workman. (Cheers.) Much had been said about the political opinions his lordship held, but he might say no other peer or commoner had shown so great a desire to put an end to the present unequal and abominable law in this respect. (Cheers.) His lordship deserved well for the high position he occupied in connection with the volunteer movement, but he also deserved well of every working man for his efforts in this direction. (Cheers.) Last year 9000 men were sent to prison for breaches of contract, but not one employer, the remedy against him being merely a civil one. (Shame.)—The Vice-President endorsed the President's opinion with reference to the services of Lord Elcho.—Mr. Pickard said that an honester man than Lord Elcho they could not find. His kindness and courtesy were unvarying. Persons in London had misrepresented his lordship's motives, but he felt bound to state his opinion that his lordship was a true friend to the working classes in the question of master and servant. (Cheers.)—The parliamentary deputation, Messrs. M'Donald, Normansell, and Pickard were reappointed, and the rate of payment to them increased 10 per cent. It was also decided that the rate of payments to all the servants of the Conference should be advanced 10 per cent.—The President said he had received a letter from the Association at Clay Cross, stating that Mr. Charles Binns, manager of the Clay Cross Coal Company, had informed the leaders of the association that he would grant ten hours per day, and a little advance in wages on tonnage, on condition that the Union was broken up. (Oh!) The letter also stated that the firm would not make this or any concession unless the Union was broken up.—The President condemned the conduct of Mr. Binns, and also Mr. Jackson, M.P. for North Derbyshire, and denounced their liberalism as false.—On the motion of Mr. Casey, seconded by Mr. Barker, the Conference condemned the conduct of the company in refusing to employ Union men, and declaring its determination to assist the men.

On Thursday several reports were received and discussed relative to compensation claims. With reference to a late explosion at Dukinfield, it was thought desirable not to take any legal steps in the matter, Mr. Astley, the proprietor, having treated the sufferers in a very charitable manner.—The President, in introducing this question, said that in Scotland 13,000 miners had adopted the eight-hour system. The labour of 2000 men had been swallowed up, and he was in hopes that in other districts 4000 men would be swallowed up. But this was not merely a question of swallowing up labour, but whether or not the work at present imposed on the miner was not too heavy. There was a growing feeling that this was the case. He referred to the fact that in Australia there was a statute limiting the hours of labour to eight hours per day; but although they did not anticipate any legislative enactment in this country, they could legislate for themselves, and if the system was established a statute might be obtained in time. He strongly recommended that a conference should be held of the county of Lancashire.—Mr. Silkstone, of South Yorkshire, said the short-hour system had been established eight years in his district, and it had produced excellent results.—Mr. Rymer, St. Helens, suggested that the system should be demanded of the masters at the beginning of next year.—Mr. Pickard moved, and Mr. Fairclough seconded, "That this conference recommend a conference of the miners of Lancashire in order to devise the best means of establishing a uniform system of working—eight hours per day; that the conference be composed of delegates from every lodge and pit, and that it be held on the second Tuesday in December."—Mr. Akroyd thought the resolution ought to apply to all the districts; and Mr. Tetlow recommended that they should approach the subject in a thoughtful manner, and advised them to cultivate a good feeling with the masters.—Mr. Baxendale did not seem sanguine as to the plan.—Mr. Dixon, West Yorkshire, said a uniform rate of payment depended upon other matters than the eight-hour principle. A good deal depended on the market and the mode of transit.—The resolution was then unanimously adopted.—It was resolved to hold a conference of miners in West Yorkshire on the first Tuesday in December, to consider the short-hours movement; and, further, that the conference wished to assist the movement throughout the country.

THE HOT-AIR ENGINE COMPANY (LIMITED).
Incorporated under the Companies Act, 1862.
Capital £15,000, in 15,000 shares of £10 each. Deposit, £1 per share on application, and £1 per share on allotment.
Subsequent calls not to exceed £2 per share, nor to be made at intervals of less than three months.
Should no allotment be made, the £1 paid on application will be returned.
SECRETARY—James D. Churchill.
TEMPORARY OFFICES,—63, KING WILLIAM STREET, LONDON, E.C.

This company is formed for the purpose of purchasing the patents of the hot-air engine, which is so extensively used in the United States, and for introducing and manufacturing it for general use in Great Britain and Ireland.
The advantages of this invention over the steam-engine are—
1.—There is no boiler; therefore no water required, and space is thereby saved—the power being obtained by the expansion of compressed air, and the gases disengaged by combustion.
2.—The utter impossibility of explosion.
3.—As the fire is enclosed in an air-tight furnace, there is no danger of ignition or explosion, in proof of which insurance companies do not charge increased premiums where these engines are used.
4.—Great economy in the working expenses. No engineer is required. A one-horse power nominal, worked in London, with coals at 30*s.* per ton, costs, including oil, &c., 5*s.* per week of 60 working hours, or 1*d.* per horse power per hour.
5.—No preparation is necessary for its erection, as it stands on its own frame. A one-horse power requires space of about 5 feet square; a common stove pipe, leading into a chimney, is all the draught arrangement required. It is self-contained, simple in construction, and not liable to get out of repair.
Experience shows that the demand for small-power engines is enormous, both at home and in the colonies; for instance, for printing, turning, sawing, pumping, hoisting, ventilators, sewing machinery, &c.
These engines can be used where it would be impossible, dangerous, or unpleasant to have a steam-engine.
The company have made an arrangement to acquire the sole and exclusive right of making, selling, and using hot-air engines constructed under various patents, and all future improvements the vendors may make.
Applications for shares, prospectuses, and any further information, to be made to the Secretary, at the offices, where an order may be obtained to see the machine in full work.

TESTIMONIALS.

12, *Red Lion-court, Fleet-street, London, Aug.* 16, 1866.—GENTLEMEN: In reply to your enquiries regarding the 1-horse power hot-air engine, I beg to state that I have had it in constant work for the last nine months driving two lathes, one planing machine, a small circular saw, &c. The cost of working, including oil, &c., amounts to less than 5*s.* per week, requiring little or no attention, and is perfectly free from all danger—in fact, a boy of 14 years of age, after a few days instruction, is quite competent to take entire charge of it. It affords me great pleasure to state that I am perfectly satisfied with it in every respect.
THOMAS JOHN LAWRENCE.

7, *Red Cross-square, Jewin-street, London, August* 17, 1866.—DEAR SIRS: In reply to your's, respecting the hot-air engine, I can say that it has worked to my entire satisfaction, driving two double-crown printing machines at a cost of 5*s.* per week, including the cost of oil. You may with confidence recommend it to anyone, as nothing can equal it for safety and economy; and they only require to be known to be appreciated. A boy fourteen years old attends to mine. Any further information that you may require I shall be happy to give you.
W. G. BUNTING
N.B.—There are one-horse power engines.—J. D. C., Sec.

BOWLING IRON COMPANY,
BRADFORD, YORKSHIRE.
BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES,
Also COG WHEELS, and other CASTINGS.
This company is prepared to furnish the above-mentioned articles in CAST STEEL of a very superior quality, made principally from their own well-known
"BOWLING IRON."
Also BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size and to any section.

BAGILLT OIL COMPANY (LIMITED),
FLINT.
MANUFACTURERS OF BLACK GREASE FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON.
TORCH AND LAMP OIL, 1*s.* PER GALLON.
Casks free.

ABEGG'S ELECTRIC MACHINES,
FOR BLASTING UNDERGROUND £5 0 0
BORING MACHINES (Richards's patent) .... £12 to 20 0 0
ONE HUNDRED ELECTRIC FUSES 0 3 0
TWENTY-FOUR YARDS of COVERED WIRE..... 0 1 0
Apply to Mr. S. RICHARDS, Crosby House, No. 95, Bishopsgate-street Within, London, E.C.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.
It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.
Being heavier than water it sinks to the bottom of a wet hole, no other tamping than water being required.
One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.
This invaluable quarrying agent may now be obtained from Messrs. WEBB and Co., Carnarvon, sole consignees from the patentee.

HUNT'S PATENT ORE SEPARATOR AND GOLD WASHING MACHINE.—Information respecting the above machines can be obtained on application to Mr. WILLIAM WARD, 95, Bishopsgate-street Within, or Mr. JOHN HUNT, at his works, Porthleven, Helston, Cornwall.
N.B.—Any person making or using the above machines, without previously obtaining a license, will be proceeded against according to law.

VULCANISED INDIA-RUBBER,
FOR ENGINEERS AND MECHANICAL PURPOSES.
VALVES—for Marine and Land Engines' Steam Packing, sheet or roll.
DELIVERY AND SUCTION HOSE—for Brewers, Distillers, Fire-engines, Gardens, &c.
MACHINE BANDS—for all descriptions of Machinery.
GAS TUBING—with or without wire.
GAUGE GLASS RINGS; WASHERS.
Price Lists free on application.
SOUTHWARK INDIA-RUBBER COMPANY (LIMITED),
67, GRANGE ROAD, BERMONDSEY, LONDON, S.E.

IMPORTANT REDUCTION IN THE PRICES OF PORTABLE ENGINES FOR 1866.
CLAYTON, SHUTTLEWORTH, AND CO.,
ENGINEERS,
MANUFACTURERS OF PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, &c.
ENGINES for STEAM CULTIVATION, SELF MOVING ENGINES for COMMON ROADS, and AGRICULTURAL PURPOSES GENERALLY.
STAMP END WORKS, LINCOLN, and 78, LOMBARD STREET, LONDON.
ALSO AT
LOWENGASSE No. 44, LANDSTRASSE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.
Descriptive, illustrated, and priced catalogues free per post.
Special Drawings when required.
THE BEST STEAM THRASHING MACHINERY MADE.

Swan Rope Works.
GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,
MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

Patent Flat and Round Wire and Hemp Ropes, &c.
JOHN AND EDWIN WRIGHT, PATENTEES,
CITY OFFICE, 19, LONDON STREET, E.C.
ESTABLISHED 1770.
Manufacturers of every description of
IMPROVED PATENT FLAT AND ROUND WIRE ROPES,
From the very best quality of charcoal iron and steel wire.
PATENT FLAT AND ROUND HEMP ROPES.
SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel), WIRE, HEMP, FLAX, ENGINE YARN, COTTON WASTE, &c.
UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.
No. 2, OSWALD STREET, GLASGOW.
CITY OFFICE, No. 19, LONDON STREET, LONDON.

COLQUITE SILVER-LEAD MINE (LIMITED).

CALLINGTON, CORNWALL.

Capital £5000, in fully paid shares of £1 each.

10s. to be paid on application, and 10s. on allotment, without further liability.

First issue 2000 shares, of which 1000 only are now available.

The plan of making a small issue of fully paid-up shares, and subsequently increasing their number if additional capital is required, secures for mining and other speculate investments a maximum of advantage, with the least possible risk—first, by admitting adventurers to a very large share on easy terms, in the event of early success; and, secondly, by securing to all absolute immunity from further calls, and this without the necessity of sacrificing existing interest. These advantages are not secured by the Cost-book System, nor by the arrangements usually adopted.

DIRECTORS—To be elected at the first meeting of shareholders, within fifteen days after allotment.

OFFICES,—53, MOORGATE STREET, LONDON.

Communications hereon may be addressed to the lessee, Colquite Mine, Callington, or to the undersigned, to whom application for shares should be made on or before Friday, Nov. 30. WILLIAM COLMAN, Secretary pro tem.

THE BRITTANY SILVER-LEAD MINING COMPANY (LIMITED).

4, ALLHALLOWS CHAMBERS, 49, LOMBARD STREET, LONDON, E.C.

The concession of mining rights over thirty square miles of territory has just been granted to this company by the Emperor of France; one of the mines opened upon is now in an advanced state, and silver-lead ore of first-class quality is being shipped to Swansea, for which prices varying from £17 10s. 6d. to £45 7s. per ton have been realised.

The directors are willing to receive applications for a limited number of the new issue of shares, which are of £1 each, payable either in full, or by instalments of 5s. each.

Further particulars relating to the concession and the mines, also specimens of the ores, may be obtained on application to Mr. N. M. MAXWELL, at the offices of the company. Reference is invited to the weekly reports from the mine, which duly appear in the *Mining Journal*.

BRITISH AND FOREIGN INVESTMENT.—

MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. SPARGO has for sale shares in English mines paying from 12 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

Mr. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investments in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. SPARGO has published the following works, viz. :—

Statistics and Observations upon the Mines of Cornwall and Devon, 1859—2s. 6d.

Ditto	ditto	ditto	1860, price 2s. 6d.
Ditto	ditto	ditto	1862, price 5s.
Ditto	ditto	ditto	1864, price 5s.
Ditto	ditto	ditto	1865, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.

Geological Maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.

A Model, or Relief, Map of Cornwall (6 ft. 6 in. by 5 ft), presenting the names of every town and village, as also every characteristic point of the county. Price £5 5s.

Dividends received, calls paid, and all orders promptly negociated.

Commission 1¼ per cent.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Mr. SPARGO'S Statistics for 1866 are now ready.

Bankers: Metropolitan and Provincial Bank (Limited).

MESSRS. CARNE AND CARTHEW,

BRITISH AND FOREIGN SHAREDEALERS, FINANCIAL AGENTS, NEGOTIATORS FOR THE SALE OF MINES AND MINING PROPERTY OF EVERY DESCRIPTION,

ST. JUST AND WEST CORNWALL MINING OFFICES, 12, NORTH BUILDINGS, BROAD STREET TERMINUS, E.C.

MESSRS. CARNE AND CARTHEW, after business relations for twenty years, have entered into partnership for the general conduct of mining business, which they believe their long experience and knowledge will enable them to transact with satisfaction to their clients.

As Sharedealers they will buy and sell on the usual charges for commission, and having no bias of their own, will ever be ready to advise their correspondents as to the best and securest investment in the market. Those of their friends who, in the early part of the year followed their counsel have benefitted, in many instances, 200 or even 300 per cent., and this, by judicious operations, will always be the case, whilst the unadvised outsider, who listens to the senseless gossip which emanates from irresponsible "mining men," are sure to lose their money.

As Financial Agents, CARNE and CARTHEW propose to enter on an entirely new field of business. It has long been patent to all who are *bona fide* adventurers in the great mining industry of the country that the Limited Liability Act, whatever may be its value or its worthlessness for other enterprises, is utterly unfit for mining purposes; for just at the moment that the property is being brought into a paying state the power to make calls becomes exhausted, and the borrowing powers which the company have, under their Deed of Settlement, can seldom or never be satisfactorily exercised. To supply this great defect in the working of companies so constituted, and thus rescue many valuable concerns from ruin, and their shareholders from serious loss, is an important object in the programme of their business.

The Transfer and Sale of Mines, as at present managed, when offered in London (and there is no other place where a market can be found) is most wretchedly conducted, as every practical man knows who glances at a catalogue. The salesman is ignorant of what he is dealing with, and he cannot convey to his clients a clear perception of the value of the estate, it being to him a sealed book. This important defect CARNE and CARTHEW, from their great experience, feel they can well supply, and will be happy to negotiate all such sales or transfers, either by private negotiation or public auction.

CARNE and CARTHEW have adopted the name of the St. Just and West Cornwall Mining Offices, because it has been the scene of their great success, they having paid dividends from more mines in those districts alone than any other firm has throughout the empire, and because those districts are, from their being almost a *terra incognita* to the London world, less dealt in than the better supported districts of Caradon and Tavistock, although, as they believe, far more deserving public support.

London Agencies for respectable constituted companies conducted.

MINES INSPECTED BY EDUCATED AGENTS OF GREAT EXPERIENCE.

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS AND SHAREBROKERS.

Reliable information can be obtained as to purchase and sale of shares.

Offices of the Ellen United Copper and Zinc Mining Company (Limited), and Hazael Grove Silver-Lead Mining Company (Limited). THOMAS MOLYNEUX, secretary, 28, Princess-street, Manchester.

MANCHESTER, AND WEST END OF LONDON.

MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER.

ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and 31, REGENT STREET, LONDON, S.W.

INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

CAPT. JOHN ROBERTS, who has just returned from Brazil, and

who has spent eighteen years in gold mining in Brazil, New Granada, &c., now OFFERS himself to INSPECT any MINES in or out of Great Britain. Capt. ROBERTS would have no objection to a permanent situation.—Address, Hotel, Schull, co. Cork, Ireland.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES,

MONTGOMERYSHIRE (late manager of the Brynpastig and Cwm Fron Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and faithfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

TO MINE, SLATE QUARRY, AND RAILWAY

COMPANIES.—CAPT. C. WILLIAMS is NOW OPEN to UNDERTAKE ALL KINDS of CONTRACTS, such as DRIVING LEVELS, SINKING SHAFTS, CONSTRUCTING WATER COURSES, CANALS, TRAMWAYS, &c., and ERECTING ALL SORTS of MACHINERY for MINING and OTHER PURPOSES, having on hand at all times a first-class staff of miners and machinists, who will proceed to any part of the world upon the shortest notice.

N.B.—In all cases 30 per cent. will be left in hand until the work is complete.

Tyn-y-Wern, Tallesin, via Shrewsbury.

CAPT. RICH, BODMIN, CORNWALL,

being in the centre of the mining districts of Devon and Cornwall, and having had 25 years' experience in the management and inspection of mines, OFFERS HIS SERVICES to INSPECT and REPORT on MINES in either of the above counties. Orders promptly attended to.

MR CHARLES BAWDEN, POLDICE, ST. DAY, SCORRIER,

CORNWALL, begs respectfully to inform his friends and the public that, in addition to his Mining Business, he has commenced that of an AUCTIONEER and APPRAISER, and any sales entrusted to him shall receive his careful attention. Mr. CHARLES BAWDEN'S long connection with the Mines of Devon and Cornwall, in the purchase and sale of materials, specially qualifies him for the valuation of all kinds of Mining Machinery, &c.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL LOVELL MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 10th day of November inst., on the petition of Thomas Phillips Tyacke, of Helston, a creditor and also a contributory of the above-named mining company, it was ordered that the said WHEAL LOVELL MINING COMPANY should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

JOSEPH ROBERTS, Truro
Dated 13th November, 1866. (Solicitor for the Petitioner).

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL LOVELL MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 1st day of December next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at Truro.—Dated Truro, November 13th, 1866.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WENDRON CONSOLS MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 8th day of November inst., on the petition of Michael Henry Williams, carrying on business under the style or name of the Gweek Company, at Gweek, a creditor and also a contributory of the above-named mining company, it was ordered that the said NEW WENDRON CONSOLS MINING COMPANY should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

JOSEPH ROBERTS, Truro
Dated 13th November, 1866. (Solicitor of the Petitioner).

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WENDRON CONSOLS MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 1st day of December next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at Truro.—Dated Truro, November 13, 1866.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH CHIVERTON MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 28th day of November inst., to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at Truro.—Dated Truro, November 14th, 1866.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH CHIVERTON MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 4th day of December next, at Eleven o'clock in the forenoon, at NORTH CHIVERTON MINE, in the parish of Perranzabuloe, within the said Stannaries, in One Lot, the MINE SETT or GRANT of the said company, and the undermentioned MINING MACHINERY, MATERIALS, and EFFECTS, viz. :

50 in. cylinder PUMPING ENGINE, with BOILER 11 tons, and a variety of other materials and effects in general use in mines, which may be inspected at any time prior to the sale, on application to Mr. SAMUEL OSBORNE, in charge thereof. HODGE, HOCKIN, AND MARRACK, Truro

(Agents for Tuffnell Southgate, 7, King's Bench Walk, Temple, London).

Dated Registrar's Office, Truro, November 14, 1866.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH FRANCES MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 27th of November instant, at Eleven o'clock in the forenoon, at NORTH FRANCES MINE, in the parish of Illogan, within the said Stannaries, in lots, the MINE SETTS or GRANTS of the said company, and the undermentioned MINING MACHINERY, viz. :—

ONE 30 in. cylinder PUMPING ENGINE, with BOILER about 10 tons. ONE 20 in. WINDING ENGINE, single, with BOILER 6 tons, and a variety of other effects in general use in mines, of which particulars may be had on application to Mr. MINERS, in possession.

S. T. G. DOWNING, Solicitor, Redruth.
HODGE, HOCKIN, AND MARRACK, Truro
(Agents of the said Solicitor).

Dated Registrar's Office, Truro, November 15th, 1866.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN RE SOUTH WHEAL BASSET MINE.

TO BE SOLD, pursuant to an Order made in a Cause Dabb *v.* Armstrong and Others, dated the 3d day of September last, at the Registrar's Office, at Truro, on Wednesday, the 28th day of November inst., at One o'clock in the afternoon,

7 (512ths) SHARES or PARTS of the defendant Robert Armstrong,
1 (512th) SHARE or PART of the defendant Richard Greenwood; and
4 (512ths) SHARES or PARTS of the defendant Emma Webb,

Of and in the said MINE.

HODGE, HOCKIN, AND MARRACK, Truro
(Agents for John Teague Trevena, Plaintiff's Solicitor, Redruth).

Dated Registrar's Office, Truro, November 15th, 1866.

WEST WHEAL VOR MINE, BREAGE, CORNWALL.

MR. CHARLES THOMAS WILL SELL, BY PUBLIC AUCTION, on Thursday, the 22d November, 1866, at One o'clock P.M., at the London Tavern, Bishopsgate-street, London, all the MACHINERY and MATERIALS belonging to the WEST WHEAL VOR MINING COMPANY, in One Lot, subject to such conditions as will be produced at the time of sale.

For further particulars, apply to Mr. J. H. MURCHISON, 8, Austinfriars; to the Agent, on the mine; or to the Auctioneer, 3, Great St. Helen's London, E.C.

BY MESSRS. NEWBOLD AND OLIVER.
DOVE HOLES, NEAR BUXTON.
TO RAILWAY CONTRACTORS, COLLIERY PROPRIETORS, ENGINEERS, AND OTHERS.

MESSRS. NEWBOLD AND OLIVER beg respectfully to give notice that they are honoured by the Directors of the Midland Railway Company with instructions to SELL, BY AUCTION, at Dove Holes, near Buxton, on Wednesday and Thursday, the 21st and 22d of November, 1866, the WHOLE of the PLANT used during the construction of the Dove Holes Tunnel, on the Midland Extension to New Mills and Manchester, consisting of EIGHT PUMPING and WINDING ENGINES, viz. :—three horizontal engines, 12 in. cylinders, and 2 ft. stroke; one ditto, 18 in. cylinder, 3 ft. stroke; ditto, 16 in. cylinder, 2¼ ft. stroke; ditto, 9 in. cylinder, 18 in. stroke; ditto, 20 in. cylinder, 4 ft. stroke. WINDING and PUMPING ENGINES, with moveable gear; boilers to each, pumps, and all fittings complete. About 100 tons of flat-bottomed rails, 5 tee bobs complete, of various sizes; set of pump rods; 16 pipes, 13 in. diameter, 9 ft. long, &c.; ditto, 11 in. pipes, 19 in. diameter, 9 ft. long, &c.; ditto, 8 in. 13 in. diameter, 9 ft. long; working barrel, clack, windbore, &c., complete; wrought iron cages for shaft, with covers, fans, bolts, and nuts; plates for centres, scrap and old metal, wagon wheels and pedestals, 2 in. metal pipes, 3 in. steam ditto, trolleys, wagon frames, tunnel wagons, water ditto, wood cisterns, tip wagons, square, round, and flat iron, points and crossings, skip irons, chains, iron plates, jumpers and stemmers, sill irons, wagon drawbars, axles, timber dogs, hanging rods, hanging irons, clips, smiths' tools, rail chairs, "Joe Smith," sinking head, wheels, pulleys, drills, new iron and steel, drills, wire ropes, capstan ropes, turntables for tram wagons, mortar mills, quantity of capital Memel timber, balks and half balks, planks, battens, larch and other props, larch tunnel bars, conducting rods, sweeps, sleepers, timber guards, colliery timber, wood and stone sheds and buildings, offices, cabins, and office fixtures, &c., &c.

Sale to commence each day at 11 o'clock, for half-past to the minute.

Dove Holes Station, on the London and North-Western Railway, is within a few minutes' walk of the place of sale. The 6·40 and 10·30 trains from Manchester stop at Dove Holes; and the 8·50 from Derby arrives at Buxton in time for the 11 o'clock train to the same station.

Catalogues ten days prior to the day of sale at the place of sale; at the *Reporter* office, Derby; or from the auctioneers, Wardwick, Derby.

BY MESSRS. NEWBOLD AND OLIVER.
DERBYSHIRE.—OAKERTHORPE COAL AND IRONWORKS, near DERBY, with the LEASES of MINERALS from HIS GRACE THE DUKE OF DEVONSHIRE and RICHARD C. STRELLEY, Esq.

MESSRS. NEWBOLD AND OLIVER are honoured by instructions from the Liquidator of the Oakerthorpe Iron and Coal Company (Limited) to SELL, BY AUCTION, at the Midland Hotel, Derby, on Thursday, 29th November, 1866, at Four o'clock, the above important COLLIERIES and IRONWORKS, with the PLANT, &c.

The Works are situate close to the Wingfield Station on the Midland Railway, fourteen miles north of Derby. Trains from the North stop at this station—8·52 A.M., 11·16 A.M., and 4·16 P.M.; from the South, 6·44 A.M., 7·59 A.M., 11·7 A.M., and 2·2 P.M.

Plans, &c., can be inspected at the office of the works; and any information may be obtained from the Liquidator, JOHN HEDLEY, Derby; or Messrs. WOODHOUSE and JEFFCOCK, Mining Engineers, Derby. Printed particulars may be obtained from the above gentlemen; the Auctioneers, Derby; or Messrs. MILES, GREGORY, and BOUSKILL, Solicitors, Leicester.

An order to inspect the works may be obtained of the Liquidator, or of Messrs. Woodhouse and Jeffcock.

LEAD MINE SHARES FOR SALE.

TO BE SOLD, BY PRIVATE CONTRACT, SEVEN (15ths) SHARES of DOWPOT SYKE MINE, in the manor of Alston, in the county of CUMBERLAND; and TWO (100ths) SHARES of GREEUHWITH MINE, also near Alston. The Dowpot Syke Mine is situated about 1½ mile from the town of Alston aforesaid, close to the main road leading to Alston, and in a rich part of the district for lead ore. The sett joins Hudgill Burn, which was the richest mine in Alston Moor, and lies between Holyfield and Guttergill Mines, both of which have been very productive, and paid good dividends. During the last twelve months, after paying all the expenses of working the Dowpot Skye Mine, a good balance has been left in favour of the company.

Further particulars may be known on application to Mr. PEART, mining agent, Alston, Cumberland; or to Mr. FORSTER, solicitor, Brampton, Cumberland.

TO IRONMASTERS, COAL MASTERS, AND CAPITALISTS.

TO BE SOLD, BY PRIVATE TREATY, either in one or two lots, TWO FARM-HOUSES, with gardens, &c., and ONE HUNDRED AND FORTY-EIGHT ACRES of FREEHOLD LAND, with exceedingly VALUABLE MINES and MINERALS thereunder, situate in the county of Stafford. The minerals, as proved by borings and actual workings, consist of the New Mine Coal, Fire-Clay Coal, Getting Rock and Poor Robin's Ironstone, Top Part of Bottom Coal, Bottom Coal, Gubbins and Balls Ironstone, Blue Flatts Ironstone, Silver Threads and Diamonds Ironstone, the Four Feet Coal, the Heathen Coal, the Brown Ironstone, the New Mine Ironstone, Yard Coal, Five Feet Coal, &c. The property also comprises COLLIERY PLANT and MACHINERY. A canal passes through the centre of it.

Part of the purchase money may remain upon mortgage, if desired. Principals or their solicitors only treated with.

Apply to Messrs. KIMBER and ELLIS, solicitors, 199, Gresham House, London.

TO BE SOLD, at a low price, TWO NEW BOILERS, made of Best Best Shropshire Plates, 24 feet long, 6 feet diameter, with two tubes, 1 foot 19 inches diameter.—Apply to TOWNSHEND, WOOD, and Co., Swansea.

SPELTER WORKS.—ON SALE, in consequence of the death of the proprietor, the TINDALE SPELTER WORKS. These valuable WORKS, and the GOODWILL of the extensive and profitable business carried on in them, are OFFERED FOR SALE by the executors of the late proprietor, by whom they were erected twenty years ago, and carried on with great success till his death. They are in Cumberland, near the Milton Station of the Newcastle and Carlisle Railway; are in full operation; and, owing to their situation in an ore-producing district, and to most important privileges enjoyed under a lease from the ground landlord, they offer to capitalists a safe and highly advantageous investment. From the nature of the business, the management is attended with little or no difficulty; the spelter made at the works is in high repute, the connection is safe and respectable, and the premises are sufficiently large to admit of a great extension of the works to meet the increasing demand for the article.

For price and further particulars, apply to E. HOUGH, Esq., Solicitor, Carlisle; or to ASTRIP CARISS, Accountant, Bank Chambers, 3, Cook-street, Liverpool.

COAL MINES FOR SALE IN THE PHILIPPINE ISLANDS.—By the decease of Mr. MARIANO ROXAS Y UBALDO, one of the partners in a company under the name or style of "EMPRESA MINERA DE LA PURISIMA CONCEPCION," which owns and is now working the coal mines of the Island of CEBU, in the district of NAGA, and with the object of winding-up his estate that the proceeds may be handed over to his heirs, the above-mentioned property is at present open FOR SALE.

The company possesses 2,160,000 square yards (Spanish measurement) of ground, and although the working of it has as yet been inconsiderable, two layers of coal, of 12 to 15 feet thick, have already been found.

The distance from the mines to the wharf is 10 kilometers, the whole of which is a public road.

The company have cattle in abundance, carts and every requisite means for conveying the coal as quickly and as economically as possible.

There are in the neighbourhood of the mines large forests, and large lots of uncultivated ground, which now produces timber necessary for the use of the mines, and which may afterwards be turned into tobacco or sugar cane plantations, for which purposes it is admirably adapted.

The Spanish war steamers burn part of this coal, the consumption of which must increase when the working of the mines extends, a course which has been so recommended by the Government.

The mines are not subject to any tax, and all machinery required for coal digging, &c., is also free of any duty.

The laws allow any foreigner to purchase, keep, and work the mines.

For further particulars, application may be made to DARTHEZ BROTHERS, 15, Austinfriars, London, from whom also a section of the mines may be obtained.

COAL IN NOVA SCOTIA.

A COAL MINE, situate in CAPE BRETON, NOVA SCOTIA, comprehending an area of one square mile, lying on the sea shore, within sight of the track of all vessels passing through the Straits of Canso, to and from the Gulf and River St. Lawrence. This mining privilege consists of several seams of bituminous coal of excellent quality, overlying each other at various depths, the principal one being 7 feet in thickness, cropping out on the side of a deep ravine 61 feet above water level, with a strike of south 85° west, dipping northerly at an angle of 16°, or 1 to 3½. Twenty-seven acres, containing 250,000 tons of coal, lie above natural drainage, requiring no hoisting machinery whatever. Five and a half millions of tons constitute the complement of this single seam. Three other seams, one of 3 feet, one of 3½ feet, and one about 5 feet, co-exist, with like strikes and dips. A safe and natural harbour, containing 70 acres of water (superficial), varying from 26 feet to 0 in depth, and partly within the area, may at small expense be rendered navigable. The proprietors of this valuable property are prepared to TREAT FOR THE SALE, or to ACCEPT PROPOSALS FOR FORMING A JOINT-STOCK COMPANY, to work the mine under a special Limited Liability Act of the Legislature of Nova Scotia, already obtained. A very small amount of outlay, from the peculiar position of the property, will render it immediately reproductive. It is among the mines nearest the United States, where the demand for bituminous coal is almost unlimited.

For plans of the locality, a report of a practical mining engineer, a chemical analysis of the coal, terms, and all other particulars, apply to H. BLANCHARD, Esq., M.P.P., 3 and 4, Bedford-row, Halifax, N.S.; or to the Hon. J. M'CULLY, Alexandra Hotel, Knightsbridge, London.

ANALYSES OF COAL, CANNEL, MINERAL OILS, and all

OIL PRODUCING MINERALS are UNDERTAKEN by
A. NORMAN TATE, F.A.S.L., &c.,
ANALYTICAL and CONSULTING CHEMIST, and CHEMICAL ENGINEER
(Author of "Petroleum and Its Products," &c.),
MOLD, NORTH WALES.

Plans and estimates for oil and chemical works prepared, and their erection superintended.

Assays of metals and their ores carefully conducted.

COAL CUTTING MACHINERY.—

The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason

to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

CREASE'S NEW AND IMPROVED PATENT BORING

MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS.

The inventor has made arrangements to supply them in any quantity, with warrantry. Orders executed according to their date of priority.

Address, EDWARD S. CREASE, Tavistock Devon.

BASTIER'S CHAIN PUMP.—

This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the

SOLE LICENSEES,
MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.,
Who SUPPLY PUMPS and LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE,
MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.

AGENTS FOR SCOTLAND.
MESSRS. P. and W. MACLELLAN, 127 and 129, IRONGATE, GLASGOW.

RAILWAYS AND MINES.—Capitalists who seek safe and

profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the Money Market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range of profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £10 to £15 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to Railways and Mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment.

MESSRS. TREDINNICK AND CO.,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON.

NICHOLLS, MATHEWS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

SANDYS, VIVIAN, AND CO.,
COPPER HOUSE FOUNDRY, HAYLE, CORNWALL,
ENGINEERS, IRON AND BRASS FOUNDERS,
MANUFACTURERS of PUMPING ENGINES for WATER-WORKS, MINING MACHINERY, MATERIALS, and TOOLS of every description.

Foreign mines supplied on the best terms, and at the shortest notice. Second-hand Mining Machinery and Pitwork in Stock; also a new 4 and a 2-horse power high-pressure vertical engines, with boilers, and a second-hand 19-inch whim engine, condensing.

PATENT FLEXIBLE TUBING AND BRACTICE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER.

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED).
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED USES, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS of PORTABLE FARM RAILWAYS, TURN-TABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for home and foreign RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.
IRONWORKS BEVERLEY, YORKSHIRE.
JAMES DEWHIRST, Sec.

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
WAGON WORKS,—SMETHWICK, BIRMINGHAM.
*** Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED),
MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK, used in the CONSTRUCTION of RAILWAY ROLLING STOCK.
CHIEF OFFICES,
3 and 4, EXCHANGE BUILDINGS, BIRMINGHAM.

BICKFORD'S PATENT SAFETY-FUSE OBTAINED the PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1862, in London, and at the IMPERIAL EXPOSITION held in Paris, in 1865.

BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE

Gun-Cotton—By Royal Letters Patent.

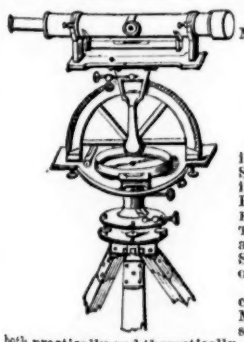
PRENTICE'S BLASTING GUN-COTTON PRODUCES NO SMOKE, and having been further REDUCED in PRICE is now by far the CHEAPEST as well as the SAFEST material which can be used in any description of mining or quarrying work.
Sample cases, together with every information, may be obtained from—
THOMAS PRENTICE AND CO.,
173, FENCHURCH STREET, LONDON, E.C.
AGENT—Mr. Thorne.

GUN-COTTON has been constantly used with great success in the tunnel of the Aberdeen Water-Works, lately opened by Her Most Gracious Majesty the Queen.

THOMAS TURTON AND SONS,
MANUFACTURERS OF
CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL,	FILES MARKED
BLISTER STEEL,	T. TURTON.
SPRING STEEL,	EDGE TOOLS MARKED
GERMAN STEEL,	WM. GREAVES & SON.

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.
SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from.



A. JEFFERY,
MATHEMATICAL INSTRUMENT MAKER,
CAMBORNE, CORNWALL.

TO MINE MANAGERS, AGENTS, AND SURVEYORS.

GENTLEMEN,—I most respectfully beg to inform you that my Manufactory for Mine Surveying and Drawing Instruments is now in full operation, and THEODOLITES, DIALS, LEVELS, MEASURING CHAINS, ENGINE COUNTERS, ASSAY SCALES and WEIGHTS, PROTRACTORS, CASES of DRAWING INSTRUMENTS, and all kinds of SURVEYING and MAPPING INSTRUMENTS are kept in stock or made to order on the shortest notice.

Having been confined for several years exclusively to the manufacture of first-class Mine Surveying Instruments—which profession I trust I have to some degree mastered both practically and theoretically—I confidently venture to solicit an inspection of my manufactures, which cannot be surpassed for accuracy and general good quality by any firm either in the metropolis or the provinces.

All kinds of repairs and alterations made to instruments.

All work executed under my own direct supervision, and none but experienced assistants employed.

All work guaranteed as first-class for quality and accuracy, and, if found otherwise, forfeited. Soliciting your kind favours,

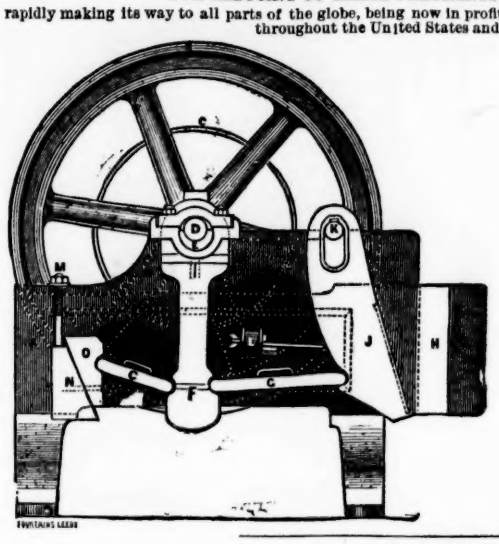
I remain, Gentlemen, yours obediently,
Camborne, July 28, 1866. A. JEFFERY.

£250,000 HAVE BEEN PAID AS COMPENSATION
FOR ACCIDENTS OF ALL KINDS BY THE
RAILWAY PASSENGERS' ASSURANCE COMPANY
Invested capital and reserve fund, £50,000,
Annual income, £85,000.
An Annual Payment of £3 to £6 5s. secures £1000 in case of Death, or £6 per week while laid up by Injury.
For particulars apply to the Local Agents, at the Railway Stations, and
OFFICES,—64, CORNHILL, and 10, REGENT STREET.
W. J. VIAN, Sec.

IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, McADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER
OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.
For the Parys Mining Company, JAMES WILLIAMS.
H. R. Marsden, Esq.

Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw, about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly,—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

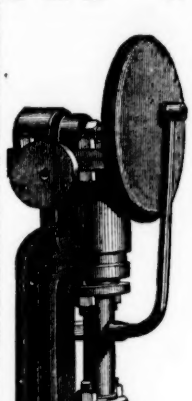
Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
JOHN LANCESTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—
H. R. MARSDEN, SOHO FOUNDRY,
MEADOW LANE, LEEDS,
ONLY MAKER IN THE UNITED KINGDOM.

GIFFARD'S PATENT INJECTOR COMPLETELY SUPERSEDED BY
THE NEW PATENT DONKEY STEAM PUMP.



SIDE ELEVATION.

[SPECIFICATION.]

This Pump is constructed on an entirely novel and simple principle, there being only a crank-shaft and fly-wheel of small size, the slide-valve being worked inside the steam chest by means of a steel crank and friction roller, thus dispensing with eccentric, rod, and straps. All the working parts are made of steel, hardened and polished. The cylinder and pump are in one casting, and bored throughout the body of the pump as well as the stuffing-box. The pump-ram is of the best gun-metal, being cast in one piece with the piston and piston-rod, and fitted accurately to the bored body of the pump, thus ensuring a nearly perfect vacuum in pumping. The stuffing-box glands are also of gun-metal polished. The valves and boxes are of the best gun-metal, the valves being of the spherical description, the covers fitted with brass cages, and the joints faced metal to metal. The slide-valve is of hard bell-metal. The steam-chest, with cylinder end, is in one piece, and may be removed without disturbing either steam or exhaust pipes. The whole engine may be taken to pieces and put together under steam in fifteen minutes, without disturbing any pipes whatever.

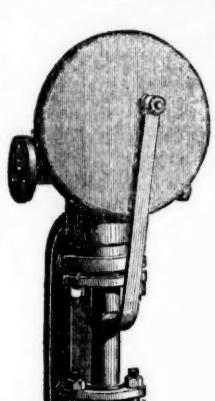
Size.	Ram. in.	Stroke. in.	Approx. h.p. boiler supplied.	Approx. gal. thrown p. hour.	Price.	Price of Giffard's Injector. In brass.	In iron.
No. 4	1½	3	15	230	£10 10	£15	£10 10
5	1⅞	3	22	350	12 12	19	13 10
6	1⅞	4	30	500	14 14	23	16 10
7	2¼	4	40	700	17 0	27	19 10
8	2¼	5½	55	900	19 10	32	22 10
9	2½	5½	75	1150	22 10	36	25 10
10	2½	6¾	90	1420	25 10	40	28 10
11	2¾	6¾	110	1720	28 10	45	31 10
12	2¾	8	120	2000	31 10	50	34 10

N.B.—Sizes and capacities similar to Giffard's Injector. All guaranteed to work efficiently.

Terms: Nett Cash on Delivery in London.

Giffard's injector will not force water over 120° Fahr., while these pumps possess the great advantage of being able to pump boiling water. Giffard's injector will not draw water over 6 ft. deep, while these pumps draw water 15 ft., and by using one size larger than required for forcing the quantity will draw 30 ft. deep. These pumps begin to work at 15 lbs. per square inch; to work at a lower pressure the next larger size must be used. Sizes up to No. 10 kept in stock. Larger sizes, and special pumps for throwing water into tanks, or as fire-engines, can be made in a few days on application to the undersigned.

BROWN, WILSON, AND CO.,
80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, S.



FRONT ELEVATION.

Now ready, price 5s., by post 5s. 4d.,
THE MINES OF CORNWALL AND DEVON:
STATISTICS AND OBSERVATIONS, for 1865.
By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker,
Gresham House, Old Broad-street, London, E.C.

Now ready. price 2s.,
ON PUDDLING. By "A PRACTICAL PUDDLER."—"The object of the work is to supply the practical man with sufficient scientific knowledge to enable him to do his work with the greatest ease to himself and with the greatest benefit to his employer, and this object has been well attained. Mr. Bayliss has culled a large number of important facts from the best writers upon the subject, and then given the results of his own experience as to the best modes of utilising scientific researches, and the most successful modes of manipulation."
London: MINING JOURNAL office, 26, Fleet-street, E.C., and all booksellers.

THE IRON TRADE CIRCULAR (RYLANDS').—The "IRON TRADE CIRCULAR" is eminently the Business Journal of the Mining Districts. Its information is authentic, unbiassed, and complete: comprising, not only the business news of the South Staffordshire District, but generally of the entire Mining Districts of the Kingdom. Annual subscription, £2 2s. (or 10s. 6d. quarterly in advance). Advertisements and orders to be addressed to Mr. GEORGE RYLAND, Union-passage, Birmingham.

[From the *Quarterly Trade Circular*, Pittsburgh, United States.]
"Among our foreign exchanges, there is one we had intended long since introducing to our readers, the 'Iron Trade Circular (Rylands'),' published weekly at Birmingham, England, at £2 2s. (postage free). To those who desire to be kept fully advised upon the foreign iron and hardware markets this publication is a valuable one, and we present its name to our readers, from conviction of its value to the American trade."

FINANCE, RAILWAYS, AND MINING IN THE UNITED STATES.—Persons in the United Kingdom and the colonies interested in the above should order THE STOCKHOLDER: MONITOR OF FINANCE AND INDUSTRY, MINING AND RAILWAY RECORD. Published every Tuesday morning, at No. 72, William-street, New York, U.S.A., 16 pages 4to, at $6 per annum for European subscriptions, postage prepaid; six months, $3. Accurate quotations of all important Bonds and Stock Securities in the United States; Government, State, City, Bank, Insurance, Petroleum, Mining, and other miscellaneous Joint-Stock Organisations, with the Financial Statements of the same; Notices of Payment of Interest and Dividends; with numerous papers on United States Finances, and the Railway and mining interests of that country. Inventors and parties dealing in railway materials and supplies, or mining machinery, will find this journal an excellent medium for advertising in the United States their manufactures and inventions. Subscriptions and advertisements received at the office of the London MINING JOURNAL, 26, Fleet-street, E.C., and by Mr. F. ALGAR, agent, 11, Clement's-lane, Lombard-street, London, E.C.

AMERICAN JOURNAL OF SCIENCE AND ARTS, published by Profs. SILLIMAN and DANA (aided editorially by Profs. Gray, Agassiz, Gibbs, Johnson, Brush, and Newton), at New Haven, Connecticut, every other month, commencing each year with January, in numbers of 140 pages each, making two volumes a year. Now in its forty-eighth year. The ninety-second volume (or forty-second volume of second series) commences on July 1, 1866. Messrs. Trübner and Co., 60, Paternoster-row, London, agents.

THE WREXHAM ADVERTISER, DENBIGHSHIRE, FLINTSHIRE, SHROPSHIRE, CHESHIRE, AND NORTH WALES REGISTER (Established 1848).—The town of Wrexham forms the centre of a large and important agricultural and mining district, which, from the increasing attention of capitalists, aided by the advantages afforded by new railways, is rapidly increasing in population, and bids fair to rival Wolverhampton in commercial importance. The Advertiser, partaking of the general prosperity, has largely increased its weekly circulation, 1000 more copies being now issued of each impression than at the close of 1864, and it now has a circulation more than double that of any other paper published in Denbighshire and Flintshire, and is the only medium by which advertisers can fully and effectually communicate with the public generally in those counties. Price 2d., stamped 3d. Published by Bayley and Bradley, Advertiser office, Wrexham.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764.)
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

CHARLES RYLAND AND SONS' WEEKLY REPORT ON THE IRON TRADE.—The "WEEKLY REPORT ON THE IRON TRADE" is a reliable authority on all matters connected with the various trades of the Iron and Mining Districts of North and South Staffordshire, Cleveland District, North and South Wales, and Scotland. The list of subscribers comprises the names of the leading firms in the great centres of industry above referred to. It contains complete, authentic, and unbiassed information relative to the various branches of the metallic trades in all parts of the country.
Arrangements have been made for illustrating advertisements with block engravings, &c. Subscriptions, payable in advance:—One year, post free, £2 2s.; half-year, post free, £1 1s.; quarter-year, post free, 10s. 6d. Remittances may be made in postage stamps. Advertisements and orders to be addressed—"Charles Ryland and Sons, The Mount, Handsworth, Birmingham."

THE FLINT COUNTY CHRONICLE: A Mining, Agricultural, and General Advertiser for Mold, Flint, Rhyl, Holywell, Northop, Buckley, Hawarden, Saltney, and neighbourhood. The great success which has attended the publication of the "County Chronicle" justifies the proprietors in drawing the attention of advertisers to the special advantages it offers as an advertising medium. For the announcements of auctioneers, public companies, and tradesmen, it is the best in the county, having attained a circulation throughout Flintshire treble that of all the other so-called local papers combined. As a newspaper it contains full and impartial reports of all local events, and devotes particular attention to the mining and oil trade interests of the district—special articles appearing from week to week. All communications should be addressed "To the Editor," Bromfield Villa, Maesydderwen, Mold.

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Shipbuilding Trades in the extensive Mining and Maritime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland, and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool.

ALL THE YEAR ROUND, AND YEAR AFTER YEAR, PARR'S LIFE PILLS are used by thousands, who thus ensure good health without pain or inconvenience, or scarcely any expense. This medicine may be resorted to at any time. Good effects will result.
Prepared by the proprietors, T. ROBERTS and Co., Crane-court, Fleet-street, and sold by all chemists.
*** NOTE.—The genuine medicine has the words PARR'S LIFE PILLS, in white letters, on the Government stamp affixed to each box.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spermatorrhœa, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered.
Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE of NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from Eleven till Three, and Six till Eight.

Just published, post free for two stamps,
WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

CONSULT DR. HAMMOND (of the Lock Hospital, &c.), No. 11, Charlotte-street, Bedford-square, London, W.C., in all those ailments which tend to embitter and shorten life, and especially those termed peculiar and confidential. At home, Nine to Two, and Six to Eight; Sundays, Ten to Twelve. The "Self-Curative Guide" post free, six stamps.
N.B.—Cases of recent infection cured in two days.

Just published, free six stamps,
LITERARY PHOTOGRAPHS; or SECRET LIFE PICTURES. In a series of Six Tableaux. Dedicated to husbands, bachelors, and widowers: with medical hints to all classes of both sexes. Sent post free on receipt of six stamps, by H. JAMES, Esq., Percy-house, Bedford-square, London.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—		8 7 8	0 10 0	Aug. 1866
200	Botallack, t, c, St. Just	91 5 0	—	300	488 15 0	5 0 0	May, 1866
10000	British Slate Company	9 0 0	—		9 per cent.		Sept. 1866
1000	Bronfloyd, l, Cardigan*	12 0 0	—		8 7 0	0 6 0	Aug. 1866
6400	Cashwell, l, Cumberland*	2 10 0	—		0 1 6	0 1 6	Aug. 1866
916	Cargoll, s-l, Newlyn	15 5 7	—		13 15 0	1 0 0	Feb. 1866
867	Cwm Erfin, l, Cardiganshire*	7 10 0	20	15 20	21 18 0	1 0 0	Oct. 1866
128	Cwmystwith, l, Cardiganshire	60 0 0	—		367 10 0	5 0 0	Oct. 1866
280	Derwent Mines, s-l, Durham	300 0 0	—		167 0 0	5 0 0	Oct. 1866
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	450	430 440	1036 0 0	6 0 0	Sept. 1866
358	Dolcoath, c, t, Camborne	128 17 6	—	260 300	816 10 0	2 0 0	Oct. 1866
6144	East Caradon, c, St. Cleer†	2 14 6	6¼	5¼ 5¾	14 5 6	0 2 6	July, 1866
300	East Darren, l, Cardiganshire	32 0 0	—		119 10 0	2 0 0	Sept. 1866
128	East Pool, t, c, Pool, Illogan	24 5 0	—		387 10 0	2 10 0	Nov. 1866
5000	East Rosewarne, c, t, Gwinear	2 15 0	⅜	¼ ⅜	0 10 6	0 1 6	Jan. 1866
1906	East Wheal Lovell, t, Wendron	3 9 0	14	11 11½	2 7 6	0 7 6	May, 1866
2800	Foxdale, l, Isle of Man*	25 0 0	—		69 0 0	0 10 0	Oct. 1866
5000	Frank Mills, l, Christow	3 18 6	—		3 5 6	0 5 0	Feb. 1866
15000	Great Laxey, l, Isle of Man*	4 0 0	19	17½ 18½	5 5 0	0 10 0	Sept. 1866
5908	Great Wheal Vor, t, c, Helston†	40 0 0	17	17 17½	10 10 0	0 10 0	Sept. 1866
1024	Herodsfoot, l, near Liskeard†	8 10 0	31	30 31	39 0 0	1 10 0	Oct. 1866
6000	Hingston Down, c†	5 10 6	—		0 10 0	0 5 0	April, 1866
400	Lisburne, l, Cardiganshire, Wales	18 15 0	—		476 0 0	3 0 0	Sept. 1866
9000	Marke Valley, c, Caradon	4 10 6	4¼	4 4¼	3 9 0	0 2 0	Oct. 1866
3000	Minera Boundary, l, Wrexham*	1 0 0	—		0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co. l, Wrexham*	25 0 0	—		205 8 0	3 0 0	Nov. 1866
40000	Mwyndy Iron Ore*†	3 5 0	—		0 6 6	0 2 6	Mar. 1866
600	Pant-y-Glien, sl.*	20 0 0	—		10 per cent.		May, 1866
200	Parys Mines, c, Anglesey*	50 0 0	—		157 0 0	5 0 0	Jan. 1866
1120	Providence, t, Uny Lelant†	10 6 7	25	21 22	81 7 6	0 10 0	Aug. 1866
512	South Caradon, c, St. Cleer†	1 5 0	330	320 340	534 10 0	5 0 0	Sept. 1866
6000	South Darren, l*	3 6 6	2	1⅜ 1⅞	0 5 6	0 2 6	June, 1866
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	9	9 9½	18 6 0	0 5 0	Oct. 1866
3000	W. Chiverton, l, Perranzabuloe†	—	60	58 60	13 7 6	2 0 0	Aug. 1866
400	West Wheal Seton, c, Camborne†	47 10 0	137½	120 130	461 14 0	2 10 0	Oct. 1866
512	Wheal Basset, c, Illogan†	5 2 6	80		622 0 0	1 0 0	Oct. 1866
1024	Wheal Friendship, c, Devon	20 0 0	—		300 0 0	1 0 0	Mar. 1866
4295	Wheal Kitty, t, St. Agnes	5 4 6	—		2 19 0	0 1 6	May, 1866
2000	Wheal Rose, c, Scorrier	—	—	5 6	1 0 0	0 10 0	Feb. 1866
396	Wheal Seton, t, c, Camborne	58 10 0	145	140 145	231 15 0	5 0 0	Oct. 1866
1040	Wheal Trelawny, s-l, Liskeard†	5 17 0	8		54 0 6	0 5 0	June, 1866
17000	Wicklow, c, i, Wicklow	2 10 0	23	22¾ 22⅞	45 15 0	0 18 0	Oct. 1866

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1200	Bryn Gwyn, l, Mold*	9 0 0	—		3 3 6	0 13 6	Aug. 1865
2880	Clifford Amalgamated, c, Gwen...	31 10 0	8	6¾ 7¼	35 6 0	0 10 0	June, 1865
1055	Craddock Moor, c, St. Cleer	11 5 0	—		7 12 0	0 4 0	June, 1865
6000	East Carn Brea, c, Redruth	3 15 0	2¾	2⅜ 2⅝	0 5 0	0 5 0	June, 1865
20000	Mining Co. of Ireland, c, l, cl.	7 0 0	19	18½	19 18 11	0 16 1	July, 1865
6000	New Birch Tor and Vitifer Cons. t	1 6 6	—		0 13 0	0 2 0	Oct. 1865
6000	West Basset, c, Illogan†	1 10 0	—		26 14 0	0 5 0	July, 1865
1024	Wheal Exmouth, l, Christow	—	—		—	0 2 6	Oct. 1865
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	12		59 17 6	0 10 0	Mar. 1865

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
5000	Cape Copper Mining*†	7 0 0	9¼	8¾ 9	2 12 6	0 10 0	April, 1866
21500	East Indian Coal, Calcutta	10 0 0	—		—	—	
15000	Fortuna, l, Spain*†	2 0 0	2¼		1 5 4	0 2 0	Oct. 1866
25000	Gen. Mining Assoc., Nova Scotia†	20 0 0	—	20 22	22 0 0	1 0 0	June, 1866
10000	Gonnessa, l.* [5000 £5 pd., 5000 £2 pd.]	—	—		7½ per cent. per annum.		
5000	Linares, l, Spain*†	3 0 0	—		11 6 4	0 5 0	Jan. 1865
59275	New Wildberg, l	2 0 0	—		0 12 0	0 2 0	Aug. 1865
10000	Panulcillo, c*†	3 0 0	3¾		10 per cent.		Yearly.
90000	Pontgibaud, s-l, France†	20 0 0	—		2 19 8	0 16 8	Dec. 1865
27500	Port Phillip, g, Clunes†	1 0 0	1	⅞ 1⅛	0 15 6	0 1 0	July, 1866
10000	Scottish Australian Mining Co.†	1 0 0	¾	⅝ ⅞	0 1 0	0 0 9	May, 1866
51000	St. John del Rey, Brazil*†	15 0 0	52	50 52	68 15 0	4 0 0	June, 1866
40000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 0	0 1 0	Jan. 1866
10000	West Canada Mining Company*	1 0 0	—		0 19 6	0 2 6	May, 1866

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
10000	Alten and Quænangen United, c*	4 10 0	—		4 5 0	0 15 0	Nov. 1853
20000	Australian, c, South Australia†	7 7 6	—		0 2 0	0 1 0	June, 1865
2464	Burra Burra, c, South Australia	5 0 0	—		325 0 0	5 0 0	Dec. 1864
12000	Cobre Copper Company, c, Cuba†	40 10 0	1½	2 3	101 0 0	1 0 0	Jan. 1865
10000	Copiapo Mining Company, Chili†	16 0 0	—		6 18 0	0 10 0	Nov. 1862
100000	Don Pedro No. del Rey, Brazil*†	0 14 0	—		0 0 9	0 0 9	Dec. 1863
70000	English and Australian, c	2 10 0	1	⅞ 1⅛	1 12 0	2 0 0	Aug. 1864
68000	Kapunda Mining Co., Australia†	1 0 0	—		0 12 0	0 1 0	June, 1864
10000	Lusitanian (Portugal)†	2 15 0	—		1 7 0	0 3 0	July, 1865
103815	Mariquita and New Granada†	1 0 0	—		0 9 6	0 1 6	July, 1859
43174	United Mexican, s, Mexico	28 5 0	2	1½ 2	2 19 0	0 5 0	Sept. 1864
10000	Vancouver, cl*†	5 0 0	—		0 15 0	0 5 0	Nov. 1864
45000	Yudanamutana, c, S. A.*†	3 0 0	1	1 1¼	0 5 0	0 5 0	Aug. 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos, l, Spain*†	2 0 0	1¾		Fully pd.
100000	Anglo-Brazilian, g*†	0 9 0	—		May, 1866
40000	Brittany Silver-Lead Mines, France* [15750 18s. pd.]	—	—		
25000	Capula, s, Mexico*†	1 12 0	1⅜	1⅛ 1⅜	Aug. 1866
30000	Chontales, g, s, Nicaragua*†	3 0 0	3	2½ 2¾	Oct. 1866
10000	Copiapo Smelting, Chili*	10 0 0	—		April, 1866
300	Copper Miners' Co. of South Australia* [150 £100 pd., 150 £70 pd.]				Nov. 1866
50000	East del Rey, g, Brazil*†	2 15 0	—		June, 1866
15000	El Chico Silver Mining and Reduction Company*	4 10 0	—		Jan. 1866
8000	English and Canadian Mining Company*	5 0 0	—		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 10 6	½	¼	Aug. 1866
80000	Great Northern, c, South Australia*†	1 11 6	—		Sept. 1862
10000	Great Barrier Land, Mining, &c., New Zealand*	5 0 0	—		Fully pd.
12000	Nerbudda Coal and Iron* [6000 £5 pd., 3000 £3 pd.]	—	—		Aug. 1865
50000	Nova Scotia Land and Gold*	1 15 0	—		Sept. 1865
15000	Otea, c, New Zealand* [5000 fully paid]	1 10 0	—		April, 1866
6000	Peel River Land and Mineral*†	100 0 0	—		Stock.
30000	Pestarena, g*†	2 0 0	2¼	1⅞ 2⅛	Aug. 1866
23000	Quebrada, c, Venezuela*†	10 0 0	1½	¾ 1¼	Fully pd.
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]	—	—		May, 1866
50000	Rossa Grande, g, Brazil*	0 7 6	—		April, 1864
15000	San Pedro del Monte, s, Mexico*	3 0 0	—		Jan. 1866
10000	San Roque, l, Spain	5 0 0	—		Fully pd.
1000	Schlossberg Colliery*	10 0 0	10		
30000	Val Antigoria, g*†	0 15 0	—		July, 1866
6000	Val Sassam, s, c, l*†	5 10 0	1⅜		April, 1866
5000	Valgodemard Mining Company*	20 0 0	—		Fully pd.
50000	Vallanzasca, g, Italy*†	0 15 0	—		July, 1866
45000	Victor Emanuel, c, Italy*	1 0 0	—		Fully pd.
20000	Washoe, g, [10000 £5 pd., 10000 £4 pd.]	—	2⅛	1½ 2	
80000	Worthing, c, South Australia*†	1 0 0	—		Fully pd.
7500	Yorke Peninsula, South Australia	1 0 0	—		Fully pd.

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance*†	25 0 0	19	19 21
40000	Australian Mort. Land and Finance†	5 0 0	5¼	4¾ 5
30000	Australasia†	40 0 0	65	62 64
10000	Bank of Egypt†	25 0 0	30	29 31
10000	Bank of New Zealand†	10 0 0	19	18 19
25000	Bank of Otago*†	10 0 0	6	4 6
25000	Bank of Queensland*†	25 0 0	10	
50000	Bank of Victoria, Australia†	25 0 0	39	37 39
50000	Brazilian and Portuguese*†	10 0 0	9½	
8915	Canada Company†	32 10 0	80	75 80
50000	Canadian Loan and Investment*†	2 10 0	—	
40000	Chart. Bank India, Aust. & China†	20 0 0	18	16 17
30000	Char. Merc. India, Lond. & China†	25 0 0	36	33 35
50000	City†	10 0 0	16	15 16
20000	Colonial†	25 0 0	37	30 35
40000	Company of African Merchants.*†	3 0 0	3	
150000	Consolidated Bank*†	4 0 0	—	5 5⅛
200000	Credit Foncier and Mobilier of England*†	8 0 0	4⅞	3 3½
10000	Discount Corporation*†	20 0 0	—	
20000	East London*†	5 0 0	4	3 3½
30000	English, Scottish, & Aust., Chart.†	20 0 0	17½	16½ 17½
20000	English and Swedish*†	20 0 0	15	13 15
250000	General Credit and Finance of London*†	6 0 0	3⅞	4 4¼
20000	Imperial Bank*†	20 0 0	24	22 24
150000	International Financial Society*†	5 0 0	3⅛	3⅛ 3¼
300000	International Land Credit*†	6 0 0	2⅛	1½ 2½
4000	London African Trading*†	10 0 0	7	
50000	London Chartd. Bank of Australia†	20 0 0	22⅛	21¼ 22¼
37500	London and County†	20 0 0	63	63 65
40000	London Financial Association*†	25 0 0	8¼	8¾ 9¼
72000	London Joint-Stock†	15 0 0	43	41 43
5000	London Mercantile Discount*†	10 0 0	—	
10000	London and South-Western*†	20 0 0	18	17 19
50000	London and Westminster†	20 0 0	95	92 94
50000	Mercantile and Exchange*†	11 10 0	—	
17156	Metropolitan and Provincial*†	20 0 0	11	9 10
20000	Mineral Rights Association*	1 0 0	—	
20000	National of Australia†	4 0 0	6	5 6
10000	National of Liverpool*†	10 0 0	13	11 12
40000	National†	30 0 0	69	67 69
37500	New South Wales†	20 0 0	46	44 46
40000	Union of Australia†	25 0 0	—	48 50
80000	Union of London†	15 0 0	—	44 46

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4000	Ballacorkish, I. of Man, l, c*	1 10 0	—		Oct. 1866
3000	Bedford Unit., c, Tavistk.*	2 6 8	—		
3200	Bedol Aur, l, Holywell	1 2 0	—		July, 1866
500	Billins, l, Flint	30 0 0	—		Fully pd.
1000	Blaendyffryn, s-l*	2 0 0	—		Mar. 1866
1248	Boscaswell, t, c, St. Just	7 1 0	—		Sept. 1866
5000	Bottle Hill, t, Plympton	1 14 6	—		June, 1866
200	Brynford Hall, l, Flint	28 0 0	—		Jan. 1866
5000	Bryn Gwiog, l, Flint	9 0 0	—		June, 1864
30000	Caldbeck Fells, l, Cumber.*	1 5 0	1⅜		Sept. 1866
1000	Camborne Consols, c	18 10 0	—		Feb. 1864
4600	Camborne Vn. & Wh. Fran.	11 8 10	1⅛		July, 1866
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 10s. pd.]				Oct. 1866
2000	Caradon & Phœnix Cons.*	0 12 0	—		April, 1865
914	Caradon Cons., c, St. Cleer	31 3 6	15		Nov. 1866
1000	Carn Brea, c, t, Illogan	25 0 0	18		Nov. 1866
6000	Carn Camborne, c, Cambn.	2 0 6	25s.	23s. 25s.	Oct. 1866
5000	Carnarvonshire, l*	4 0 0	—	4¼ 4½	Fully pd.
4005	Cardigan Cons.* [1000 £5 pd., 3005 £4 5s. pd.]				April, 1866
600	Cardiganshire, l*	17 10 0	20		Sept. 1866
20000	Carysfort [3200 £2½ pd., 16800 £1⅜ pd.]			3s.	Mar. 1865
66000	Castell Carn Dochan, g*	0 8 6	—		
2500	Cefn Cilcen, l, Flint*	2 18 0	—		Aug. 1866
2500	Central Minera, l*	3 7 6	—		April, 1866
16000	Central Snailbeach l	1 0 0	—		Fully pd.
3000	Chiverton, l, Perranzabu..	8 17 6	6¾	7 7½	Aug. 1866
3000	Chiverton Moor, l, Perranz.	5 11 0	4⅜	4 4½	Aug. 1866
4000	Clara Unit., l, Ponterwyd*	2 10 0	—		July, 1865
16000	Coolartra & Bond* [5300 £1 pd., 10700 16s. pd.]				Feb. 1865
256	Condurrow, c, t, Camborne	76 10 0	—		
5000	Connorree, c, sul, Wicklow*	1 0 0	—	13s. 6d.	Fully pd.
2450	Cook's Kitchen, c, Illogan.	19 14 9	5	7 7½	July, 1866
1024	Copper Hill, c, Redruth	12 10 0	—		June, 1866
6500	Cornish Clay and Tin*	1 0 0	—		Fully pd.
6000	Cornwall Great Consols	1 8 0	—		May, 1866
861	Crane, c, Camborne	32 4 6	—		July, 1866
12000	Crelake, c, Tavistock	3 8 0	—		July, 1866
2500	Crowan Consols, c, Crowan	5 11 0	—		Dec. 1865
6000	Cuddra, t, St. Austell	4 18 6	—		June, 1866
35000	Dale, l, North Stafford	1 0 0	5s.	2s. 4s.	Fully pd.
1000	Darren, l, Cardigan*	12 4 0	—		Oct. 1866
5000	Devon Great Maria*	7 0 0	—		May, 1866
4000	Devon Wheal Frances, c	1 4 6	—	1¾ 1⅞	Sept. 1866
1024	Devon Wheal Lopes, c*	17 0 0	—		July, 1866
12800	Drake Walls, t, Calstock	2 1 0	—	¼ ½	
656	Ding Dong, t, Gulval	48 14 6	—		Sept. 1865
20000	Dolfrwynog, g*	0 15 0	—		June, 1864
25000	Dundalk, Ireland, l*	0 12 6	—		April, 1866
3000	Dyfngwm, l, Wales	13 7 0	—		June, 1866
1000	Eaglebrook, l*	17 19 0	—		Feb. 1865
512	East Basset, c, Redruth†	29 10 0	26	21 23	
1000	East Basset and Grylls, t..	3 5 0	—		July, 1865
6000	E. Bottle Hill, t, Plympton	0 6 6	—		Oct. 1865
2000	East Buller, c, Gwennap	2 0 0	—		Mar. 1865
4000	East Chiverton, l, Perranz.	2 6 9	—		Sept. 1866
2048	E. Falmouth, s-l, Kenwyn.	5 0 6	—		April, 1864
6000	E. Grenville, c, Camborne..	3 1 0	2⅛	1⅞ 2⅛	May, 1866
4000	E. Gunnislake & S. Bed. c.	9 0 6	—		Aug. 1866
6000	East Holyford, c, Ireland*.	3 0 0	—		Oct. 1866
6145	East Jane, s-l, Cardinham.	2 17 6	—		April, 1865
6000	East Laxey, l, Isle of Man*	2 10 0	—		Dec. 1865
1000	East Moor, s	0 5 0	—		Aug. 1866
3986	E. Providence, t, Uny Lel.	4 19 9	—		Nov. 1866
5000	E. Tresavean, c, Gwennap.	0 10 0	—		May, 1865
6000	East Snaefell, l, I. of Man*	2 0 0	—		Dec. 1864
5610	East Seton, c, Camborne	0 11 0	—	½ ⅝	Oct. 1865
9000	E. St. Just, t* [6000 £3 10s. pd., 3000 £1 10s. pd.]				Nov. 1866
256	East Tolgus, c, Redruth	96 0 0	—		April, 1866
1190	E. Wh. Agar, c, St. Cleer..	12 17 0	—		Jan. 1865
2048	East Wheal Grylls, t, c	3 10 0	—		July, 1866
4000	E. Wh. Russell, Tavistock†	11 14 0	3½	3 3¼	Oct. 1866
15000	Ellen Unit., c, z, St. Agnes*	1 0 0	—		Nov. 1866
6000	Fortescue Consols	0 12 6	—		
940	Fowey Con., c, Tywardreath	5 1 6	—		June, 1866
6000	Furze Hill Wood Con. Buckl.	1 16 0	—		Feb. 1866
10000	Fursdon, c* [5000 £1 10s.]	—	—		Mar. 1865
1026	Garden, t, Morvah	5 12 9	—		Mar. 1865
4096	Garlidna Unit., t, Wendron	5 7 7	—		Feb. 1866
4000	Gawton, c, Tavistock	3 5 6	3¼	2¾ 3¼	Feb. 1866
6000	Gen. Min. Co. for Ireland, c	4 0 0	3⅜		
40000	Glasgow Caradon c* [30000 £1 pd., 10000 10s. pd.]				Sept. 1866
2000	Golch Hill, l, Flintshire	1 13 5	—		Sept. 1865
6144	Gonamena, c, St. Cleer	5 14 0	—	¾ 1	Aug. 1866
6000	Gothic, s-l, Cardigan*	2 10 0	—		Fully pd.
5680	Goginan	12 10 0	—		April, 1864
486	Grambler and St. Aubyn†.	70 0 0	5	4 5	Nov. 1866
4096	Great Caradon, c, St. Ives.	3 9 0	½	¼ ½	Aug. 1866
10000	Great Devon and Bedford.	2 10 0	—		Mar. 1866
3000	Gt. East Lovell, t, Helston	1 15 0	—		May, 1866
5000	Great Mona, l, Isle of Man*	3 10 0	—		June, 1866
5000	Great North Downs, c	5 18 0	2⅝	2¾ 3¼	Oct. 1866
40000	Gt. Northern of Ireland*	0 10 0	—		
12500	Gt. No. Laxey (Isle of Man)*	0 10 0	1¾		Feb. 1865
6000	Great Retallack, s-l, b	1 19 0	¾	8s. 10s.	Oct. 1866
6000	Great South Chiverton, s-l.	1 9 6	—		July, 1866
6000	Gt. So. Tolgus, c, Redruth.	0 19 6	¾	⅜ ⅞	Aug. 1866
3000	Great West Chiverton, l	1 0 0	—		June, 1864
3313	Great Wheal Baddern, t	7 17 6	—		June, 1863
6000	Gt. Wh. Busy, c, t, Kenwyn	16 19 6	—		July, 1866
1798	Gt. Wh. Fortune, t, Breage	26 12 0	—	4½ 5	Sept. 1866
10000	Great Wh. Metal, Breage*.	2 0 0	—		May, 1865
119	Great Work, t, Germoe	100 0 0	—		
2500	Grit and Stapeley, l*	10 0 0	—		July, 1864
10240	Gunnislake (Clitters'), t, c.	4 15 0	—		Aug. 1866
6068	Gwydyr Pk. Con., Llanrwst	1 12 6	—		Aug. 1866
6000	Hallenbeagle, c, Kenwyn..	2 9 0	—		Aug. 1866
6400	Harwood, l, Durham*	0 6 0	⅞	⅝ ⅞	Sept. 1864
5000	Havan, l, Cardigan*	4 15 0	—		Mar. 1866
7219	Hawkmoor, t, c, Calstock..	3 14 0	—		July, 1866
5000	Hendre, l, Flint*	4 0 0	—		April, 1865
6000	Illogan, t, c	0 19 6	—		June, 1866
6000	Lady Bertha, c, Tavistock†	3 19 6	—		Oct. 1866
3000	Leawood, c, l, Lydford	3 3 6	—		June, 1866
1019	Leeds and St. Aubyn, t, c..	19 13 4	—		Mar. 1866
963	Lelant Cons. t, Uny Lelant	35 0 0	—		Mar. 1863
160	Levant, c, t, St. Just	10 8 1	—		June, 1866
6000	Levant United, St. Just	0 10 0	—	¾	
2000	Lower Park, l, Denbigh*	3 11 0	—		Jan. 1864
3000	Maes-y-Safn, l*	20 0 0	—		Jan. 1866
6000	Maudlin, c, Lostwithiel	4 7 0	—		May, 1865
5000	Merllyn, l, Flint	3 15 6	—		Jan. 1866
3000	Minera Western Boundry*	0 2 6	—		Sept. 1863
4975	Molland, c, South Moulton	3 13 0	—		Aug. 1865
640	Mount Pleasant, l, Mold	4 0 0	—		
1024	Nangiles, t, c, Kea	26 5 0	16	13 16	Oct. 1866
4000	Nanteos, l, Cardigan*	1 0 0	—		Fully pd.
512	Nant Minera, l*	6 10 0	—		Jan. 1865
250	Nanty Mines, l, Montgom.	20 0 0	—		Aug. 1866
6000	New Clifford, c, Gwennap*	2 0 0	—		Mar. 1866
24000	New Cornish [12000 £1 pd., 12000 15s. pd.]				Sept. 1866
6400	N. Crow Hill, l, St. Stephen	3 1 0	—		Aug. 1866
6000	New East Birch Tor, t	1 2 6	—		June, 1865
6514	New E. Russell, c, Tavistk.	0 10 6	—		Sept. 1866
6400	Nether Hearth, l, Dufton..	1 1 0	—		May, 1865
400	New Hendra, t, c, Breage..	14 11 0	—		Mar. 1866
6400	New Pembroke, t, c	1 0 6	—		Nov. 1866
5755	New Treleigh, c, Redruth..	4 8 0	—		May, 1866
960	New Trevenen, t, Wendron	8 14 0	—		May, 1866
470	Newtonards Min. Co. Down	50 0 0	—		
4096	New Wheal Lovell, t	1 5 0	—		Aug. 1866
15000	New Wheal Martha, c*	1 0 0	—		Fully pd.
400	New Wh. Seton, c, Cambn.	53 15 0	40	35 40	Sept. 1866
2000	New Wheal Towan, c, t	1 10 0	—		July, 1866
6000	North Chiverton, l	2 6 0	—		June, 1866
16000	North Devon, s-l*	0 16 0	—		July, 1866
5000	No. Dolcoath, c, Camborne.	4 0 0	—		Oct. 1866
6000	North Downs, c, Redruth..	4 11 4	—		Aug. 1866
1361	No. Grambler, c, Redruth..	6 14 9	—		Aug. 1866
16000	N. Hallenbeagle [8000 £1 pd., 8000 8s. 6d. pd.]				July, 1865
6000	North Jane, t, s-l, Kenwyn.	3 0 6	—		Sept. 1866
6000	North Kit Hill, l, c*	1 0 0	—		
2000	North Levant, t, c, St. Just	10 8 0	—		Sept. 1866
20000	Nth. Minera, l, Wrexham*	1 0 0	—		Fully pd.
4000	N. Phœnix, c, Linkinghorne	4 4 0	—		May, 1864
6400	North Pool, c, Illogan	4 8 6	—		June, 1866
700	No. Roskear, c, Camborne.	48 1 0	5		Nov. 1866
2000	No. Shepherds, l, Newlyn..	6 0 0	—		July, 1866
5936	No. Treskerby, c, St. Agnes	1 9 0	3⅝	3½ 3¾	
6000	North Wheal Basset, c, t†	5 0 0	—		April, 1866
5610	North Wheal Crofty, c†	3 11 3	1⅝	2 2½	July, 1866
6144	N. Wh. Robert, Smp. Spiney	4 6 5	—		Feb. 1866
12288	Okel Tor, c, Calstock	2 7 4	—		Aug. 1866
8000	Old Gunnislake, c, Calstock	2 10 0	—		Aug. 1866
5000	Orsedd, l, Flintshire	0 0 8	—		
6400	Par Consols, c, St. Blazey†.	2 2 0	¾		Nov. 1866
6000	Par and St. Blazey Cons. t, c	1 18 9	—		Sept. 1866
8465	Pedn-an-drea, t, Redruth..	5 10 6	—		July, 1866
5000	Pendeen Consols, c, St. Just	5 15 0	—		Oct. 1866
4000	Penhale Wheal Vor, t, c	2 15 0	—		Oct. 1866
5000	Penhalls, t, St. Agnes	3 0 0	—		May, 1866
15000	Penhale and Lomax, s-l	1 10 0	—		Oct. 1866
512	Penhallow Moor, s-l	9 10 0	—		Sept. 1865
6000	Penralt, s-l, Merioneth*	2 7 0	—		Feb. 1865
200	Pentre Lygan, l*	30 0 0	—		May, 1855
1772	Polberro, t, St. Agnes	15 0 0	—		Fully pd.
512	Polbreen, t, St. Agnes	8 0 0	—		Aug. 1860
10000	Prince Arthur Consols, l*	2 0 0	—		Fully pd.
12800	Prince of Wales, t, Calstock	0 11 6	29s.	25s. 27s.	Nov. 1866
6000	Prosper Un., t, c, St. Hilary	8 14 0	—		July, 1866
12000	Redmoor, c, t, Callington..	1 9 6	—		Feb. 1866
6000	Reinnie Laxey, l, I. of Man*	4 0 0	—		Feb. 1865
5000	Rhafna, l, Carnarvon*	0 11 0	—		Dec. 1864
1024	Rose and Chiverton Untd.	5 0 0	5¼	5⅛ 5⅜	Nov. 1866
2000	Rosecliff and Tolcarne*	5 0 0	—		
3973	Rosewarne Consols, c	5 2 6	—		Feb. 1866
6000	Rosewall Hill and Ransom	3 10 6	½	10s. 12s.	Aug. 1866
3848	Rosewarne United, c, t	4 0 4	⅜	½ ⅝	July, 1866
20500	Snaefell, l, Isle of Man*	1 0 0	—		Fully pd.
400	Silver Brook, s-l, Carmar.*	2 0 0	—		July, 1866
4096	Sithney Wheal Metal, t	4 5 6	—		Oct. 1866
12000	Sortridge Cons., c, Tavist.†	1 12 0	—		June, 1866
512	South Basset, c, Gwennap.	22 0 8	8		Feb. 1866
100	South Bryn Gwiog, l	7 0 0	—		July, 1865
1024	South Callington, s-l	5 12 6	2⅜	2⅛ 2⅜	July, 1865
6000	South Carn Brea, c, Illogan	8 10 6	—		Jan. 1866
3000	So. Chiverton, s, l, Perran.	5 15 0	—		June, 1866
2500	South Cornwall, t*	13 0 0	—		July, 1866
6138	So. Condurrow, t, c, Camb.	3 11 0	⅝	9s. 11s.	May, 1866
2283	South Crenver, c, Crowan..	12 9 0	—		Oct. 1865
6000	S. Dolcoath & Carnarth. Con.	2 16 6	—		Aug. 1865
5000	So. Exmouth, l, Christow..	2 17 0	—		Feb. 1866
5000	So. Foxdale, l, I. of Man*..	3 10 0	—		Mar. 1865
1024	So. Herodsfoot, l, Liskeard	9 10 0	—		April, 1866
2000	South Lovell, t, Wendron..	2 10 0	—		Mar. 1866
4000	South Minera, l, Wrexham*	5 0 0	—		Dec. 1865
96	South Pant-y-Gof, l	27 0 0	—		May, 1864
30210	South of Scotland*	0 17 6	—		Sept. 1866
937	So. Wh. Crofty, c, Illogan.	24 10 10	—		Feb. 1865
496	So. Wh. Frances, c, Illog.†	18 18 9	22½	19 20	
6000	South Wheal Grenville, t, c	0 15 6	—		June, 1866
4152	South Wheal Leisure, t, c..	1 10 0	—		Feb. 1866
400	So. Wh. Seton, c, Camborne	74 13 0	—		Oct. 1866
512	South Tolgus, c, Redruth..	9 10 0	—		Aug. 1866
3000	South Trevenna, t, c*	2 0 0	—		Dec. 1865
794	Spearne Cons., t, St. Just..	6 19 6	—		June, 1866
280	Spearne Moor, t, St. Just..	5 2 0	—		May, 1866
4000	St. Day Unit., t, Redruth..	15 10 0	—		Sept. 1866
940	St. Ives Consols, t, St. Ives.	9 15 0	—		
760	St. Ives Wheal Allen, t	17 12 0	—		May, 1866
9000	St. Just Cons. t [6000 £1 pd., 3000 10s. pd.]				Sept. 1866
7000	Stiperstones, l, Salop*	4 0 0	—		May, 1866
920	Stray Park, c, t, Camborne†	40 13 0	2		Oct. 1866
5000	Swincombe Vale, t*	0 12 6	—		May, 1865
3500	Tin Hill, t, St. Austell	1 8 0	—		Jan. 1866
6000	Tolcarne, c, Camborne	3 1 6	—		July, 1866
6000	Tolvadden, c, Marazion	1 10 0	—		Jan. 1866
572	Trelyon Consols, t, St. Ives.	15 10 0	—		
1007	Trencrom, t, Uny Lelant..	13 16 8	—		April, 1866
501	Tresavean and Trethurrup	15 10 0	—	5 5¼	Nov. 1865
4440	Trevenen & Tremenheere..	7 11 0	—		June, 1865
4096	Treweatha, s-l, Menheniot.	7 7 0	—		Nov. 1866
1943	Treworlis, t, Wendron	10 5 4	—		Sept. 1866
6400	Troedyrhiw, l*	0 4 6	—		Mar. 1866
1000	Trumpet Cons., t, Helston.	11 10 0	—	8 10	
6400	Tyne Head, t, c*	0 17 0	—		Sept. 1864
20000	Vale of Towy, l, Carmarth.	0 17 6	—		Aug. 1865
4200	Vigra and Clogau, c, Dolg.*	5 0 0	—		Fully pd.
60000	Welsh Gold, Dolgelly*	1 0 0	—		Fully pd.
20000	West Beam, t*	1 0 0	—		Fully pd.
1024	West Caradon, c†	15 0 0	16	15 16	Oct. 1866
40000	West Clogau, g, Merioneth.	1 0 0	—		Fully pd.
1000	West Cwm Erfin, l*	5 0 0	—		July, 1866
2850	W. Condurrow, t, c, Cam...	12 11 3	—		Aug. 1866
256	West Damsel, c, Gwennap.	38 10 0	—	25 30	
5000	West Godolphin, t	3 0 0	1⅜	1⅛ 1⅜	
2751	West Great Work, t*	5 11 0	—		June, 1866
12000	W. Maria & Fortescue, Lam.	3 8 0	—		Oct. 1866
1000	West Nanty, l*	10 0 0	—		Jan. 1866
6000	Westminster, l*	5 0 0	5¼	5 5¼	Fully pd.
1000	West Rose Down, c, Linkin.	16 10 0	—		Oct. 1866
256	W. Sharp Tor, c, Rillaton..	185 0 0	—		Mar. 1865
1056	West Stray Park, c, Camb.	11 2 6	—		June, 1865
512	West Tolgus, c, Redruth	50 10 0	—	24 25	Oct. 1866
512	W. Wh. Frances, t, Illogan	104 15 0	—	3 5	Aug. 1866
5000	W. Wh. Kitty, t, St. Agnes.	2 13 6	⅛	¼ ⅜	Sept. 1866
10000	W. Wh. Martha, c, s, Stoke.*	1 5 6	—		July, 1864
1360	W. Wh. Prosper, t, Lanivet	5 18 0	—		Oct. 1863
4096	W. Wheal Vor, t, Helston.	1 15 0	—		Mar. 1866
8000	Wharfedale Mining Co.*	0 5 0	—		
6000	Wheal Agar, c, Illogan	6 8 0	—	⅞ 1⅛	July, 1866
1000	Wheal Basset and Grylls, t	7 18 6	—		Aug. 1866
512	Wheal Buller, Redruth†	19 10 0	20	19 20	May, 1866
1000	Wheal Curtis, c, Crowan	18 0 4	—		Oct. 1866
6000	Wheal Crebor, c, Tavistock	2 5 0	⅝	8s. 10s.	Nov. 1866
6144	Wh. Damsel, c, t, Gwennap	2 15 0	—		July, 1863
4096	Wh. Edward, c, Calstock	9 1 6	—		Dec. 1865
849	Wheal Emily Henrietta, c.	16 15 0	—	17 20	Oct. 1866
4000	Wh. Emma, c, Buckfastlei.	3 19 0	—		July, 1865
6000	Wheal Grenville, c, Camb.†	9 6 0	1⅛	1⅛ 1¼	Aug. 1866
1024	Wh. Grylls, t, Perranuthn.	10 11 0	—		Aug. 1866
4860	Wheal Hartley, c, Gwinear	2 10 1	—		May, 1866
6000	Wheal Ida, s-l, St. Ive	1 0 0	—		Sept. 1866
1024	Wh. Kitty, t, Uny Lelant†.	3 10 6	—		
512	Wheal Jane, s-l, Kea	10 10 0	—		Sept. 1866
896	Wh. Margaret, t, Uny Lel.	13 17 6	—	3 4	
728	Wheal Margery, t, c	23 4 10	—		Oct. 1866
100	Wheal Mary, t, Lelant	36 2 6	—		
6000	Wheal Mary Florence, c*	1 10 0			May, 1866
1000	Wh. Mary Hutchins, Plymp.	1 5 6	—		Aug. 1866
6000	Wh. Norris, t, c, St. Cleer..	4 6 1	—		Sept. 1866
80	Wheal Owles, t, St. Just	70 0 0	—		
1024	Wh. Par, t, St. Blazey	8 8 0	—		Jan. 1866
1024	Wheal Polmear, c	8 13 9	—		Sept. 1866
240	Wh. Reeth, t, Uny Lelant.	124 4 11	—		Nov. 1866
1500	Wheal Sarah, t, Lanivet	0 13 8	—		June, 1864
6000	Wheal Sparnon, c, Redruth	2 14 0	—		July, 1866
1920	Wh. Trannack, c, Sithney.	1 12 3	—		April, 1867
2044	Wh. Tremayne, t, Gwinear	7 1 3	—		Aug. 1866
1200	Wheal Trevenna, t, c*	8 0 0	—		Aug. 1866
4096	Wheal Uny, t, c, Redruth..	10 10 0	—	18s. 20s.	June, 1866
4450	Wheal Vlow, t, Perranzab.	1 7 0	—		Feb. 1865
6000	Wheal Union, c, Redruth..	5 1 11	—		June, 1866

MISCELLANEOUS.

Shares.		Paid.	Last Pr.	Bus. done.	Last Call.
60000	Anglo-American Telegr.*†	10 0 0	13⅝	14¾ 15	
20000	Anglo-Mexican Mint†	10 0 0	16½	16 17	
600000	Atlantic Telegraph*†	100 0 0	50	38 43	
20000	Australian Agricultural†	20 10 0	19	17 19	
25000	Bolckow, Vaughan*†	17 10 0	—		
6000	British American Land†	44 0 0	25	20 25	
5348	Brit. & Irish Mag. Teleg.*†	100 0 0	90	88 92	
27000	China Stm.-ship & Lab. Coal†	11 0 0	—		
20000	City London Real Prop.*†	6 10 0	—	3½ 4½	
20000	City Offices*†	15 0 0	—		
50000	Commercial Uni. (Insu.)†	5 0 0	5¼	5	
20000	Consolidated Discount*†	12 10 0	—		
42000	Copper Miners of Eng.† [2000 £25 pd., 40000 £100 pd.]				
10000	Cred. Fonc. of Mauritius*†	10 0 0	7½	5½ 6½	
20000	E. Indian Land, Credit*†	10 0 0	—		
80000	Ebbw Vale Iron Co.*†	23 0 0	10	11 11½	
100000	Egyptian Com. & Tradg.*†	5 0 0	4¼	4	
879975	Electric Telegraph †	100 0 0	138	133 138	
20000	English and For. Credit*†	7 10 0	4½		
10000	Eng. & Scottish Marine*†	5 0 0	—		
25000	Fairbairn Engineering*†	5 0 0	4½	3¼ 4½	
30000	Fore-street Warehouse*†	12 0 0	13¼	12⅞ 13	
20000	General Stm. Navigation†	14 0 0	27	25 27	
4000	Hollybush Col. and Coke*	5 0 0	—		May, 1866
20000	Home and Colon. Assur.*†	5 0 0	2		
100000	Hudson's Bay†	20 0 0	17	17 17½	
20000	Humber Ironworks*†	20 0 0	—		
80000	Im. Land Co. Mersailles*†	10 0 0	3¾	2½ 3¼	
100000	Imperial Mercan. Credit*†	7 10 0	—		
80000	Joint-Stock Discount*†	10 0 0	—		
20000	London and Caledonian*†	5 0 0	2		
12000	London Dist. Telegraph*†	5 0 0	—	¾ 1⅛	
148525	London Gen. Omnibus *†	4 0 0	3¼	3 3¼	
5000	London and Glas. Engi.*†	25 0 0	—		
64500	London & Prov. Marine*†	2 0 0	2⅛		
40000	Millwall Ironworks*†	7 10 0	2¼		
15000	Royal Mail Steam*†	60 0 0	—	97 101	

b, blende; cl, coal; c, copper; g, gold; l, lead; s, silver; sl., slate; s-l, silver-lead; t, tin; z, zinc.

*** Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange.

*** Our object being to make the Share List correct, we earnestly call upon those who have the power to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet with ready attention.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, 26, FLEET STREET, E.C. where all communications are requested to be addressed.—November 17, 1866.